



MODEL:RSH-1151
RSH-1651

ROLL LAMINATOR
Service Manual



Table of Contents

1. Safety Precautions	3 ~ 3
2. Troubleshooting	4 ~ 13
2.1) Rollers Not Heating	4 ~ 5
2.2) Rollers Over Heating	6 ~ 6
2.3) Rollers Not Running	7 ~ 9
2.4) No Main Power	10 ~ 11
2.5) Count Sensor Not Working	11 ~ 13
3. Replacing Parts	14 ~ 16
3.1) Right Cover	14 ~ 14
3.2) Left Cover	15 ~ 15
3.3) Rear Cover	15 ~ 15
3.4) Main PCB	15 ~ 15
3.5) Sub PCB	15 ~ 15
3.6) Heaters	16 ~ 16
3.7) Cross Cutter	16 ~ 16
4. Adjustments	17 ~ 17
4.1) Adjusting Take-Up Shaft Speed	17 ~ 17
4.2) Adjusting Front and Rear Roller	17 ~ 17
5. Optioning Equipment	18 ~ 18
6. Parts List	19 ~ 29
6.1) RSH-1151 Parts List	19 ~ 23
6.2) RSH-1651 Parts List	24 ~ 29
7. Exploded Drawings	30 ~ 44
7.1) RSH-1151 Whole Exploding Drawing and Part Exploding Drawing	31 ~ 37
7.2) RSH-1651 Whole Exploding Drawing and Part Exploding Drawing	38 ~ 44
8. Wire Diagram	45 ~ 48

1. Safety Precautions

Failure to comply any of the following safety procedures could result in serious injury. Please read the instructions carefully and keep for future reference.

1. Only a licensed electrician should install wiring and outlet for the laminator.
2. Ensure the unit is plugged into a properly grounded outlet with the correct voltage.
3. Keep hands and clothing (ie.Neckties)away from rollers. The rollers are pinch points that can trap body parts or clothing and cause serious injury .
4. Keep flammable and wet objects away from the machine .
5. Place machine on a sturdy and level surface.
6. Avoid excessive sunlight, humidity and extreme temperatures.
7. Ensure the unit is turned off, cooled ,and unplugged from the outlet prior to moving and/or repairing.
8. Keep out of reach of children.
9. Only Royal Sovereign authorized maintenance and service technicians should make repairs.
10. Do not attempt to laminate items that exceed total recommended material thickness for the unit.
11. When cleaning the machine, don't use flammable sprays or materials.
12. Do not touch the rollers when they are hot or place foreign objects inside the machine.
13. Do not cover the surface of the machine until the machine has completely cooled.

2. Troubleshooting

Note: While repairing:

- a. Make sure the power plug is unplugged from the power outlet.*
- b. Open both side covers and rear cover.*
- c. Be sure to follow the steps below in order.*

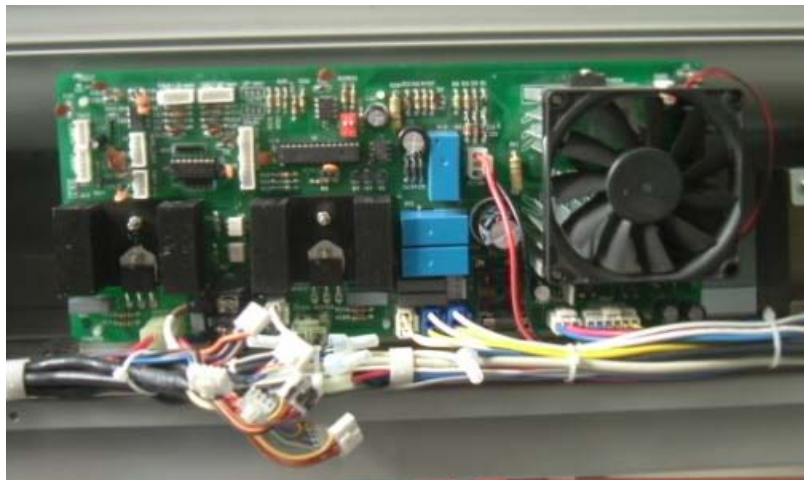
2.1 Rollers Not Heating

CAUSES:

- 1. Improper laminating mode.**
- 2. Heating wire is not connected to the main PCB.**
- 3. Blown (burnt) upper and/or lower wire fuse (T/Fuse).**
- 4. Defective Bi-Metal.**
- 5. Defective heater.**
- 6. Defective Main PCB.**

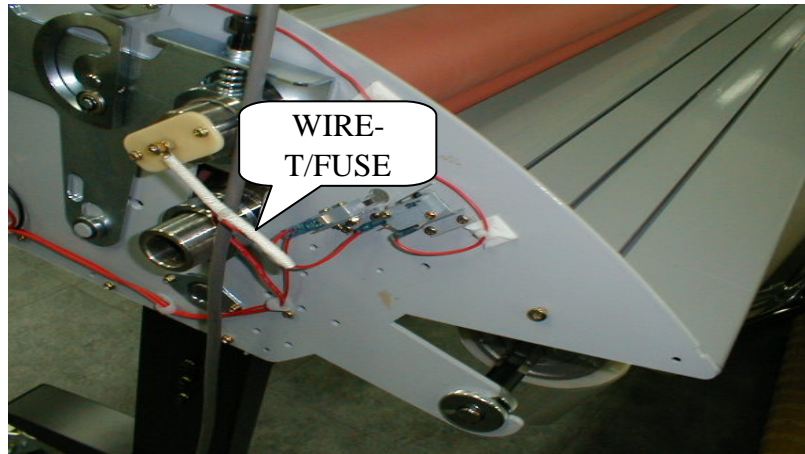
MEASURE

- 1. Improper laminating mode.**
 - a. Ensure that the laminating mode is in the “Hot” mode, not the “Cold” mode.
Press “C/HOT” button on the control panel to change the mode.
- 2. Heating wire is not connected to the main PCB.**
 - a. Connect the upper and lower heating wires to the main PCB.



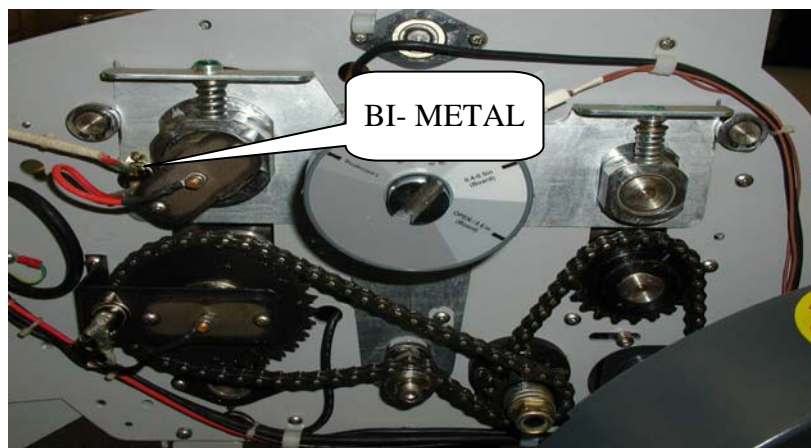
3. Blown (burnt) upper and/or lower wire fuse (T/Fuse).

- a. Replace the T/Fuse wire located on the left-hand side.



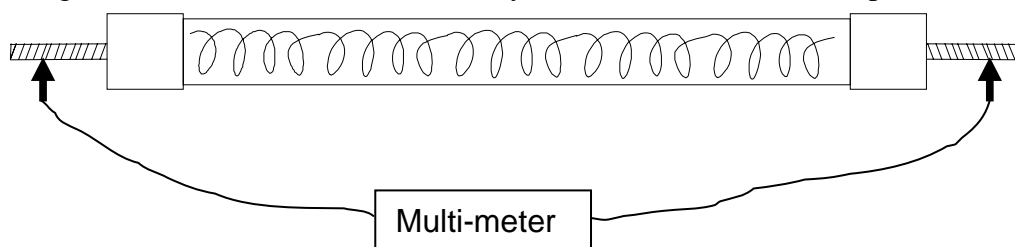
4. Defective Bi-Metal.

- a. Replace the Bi-Metal

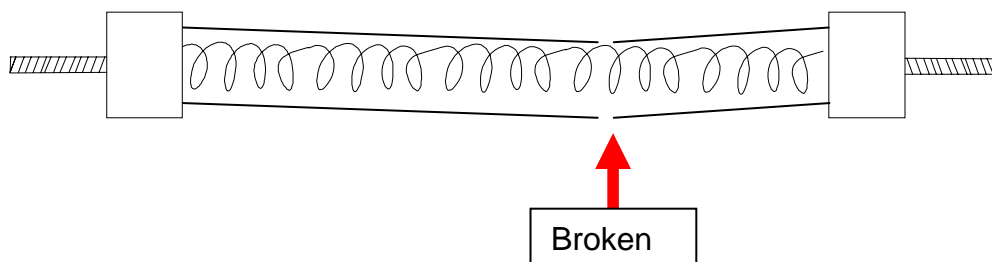


5. Defective heater.

- a. Using the multi-meter, test the continuity of the heater. If it fails, replace the heater.



- b. Physically examine the heater assembly for breakage.



6. Defective Main PCB.

- a. Replace the PCB Main.

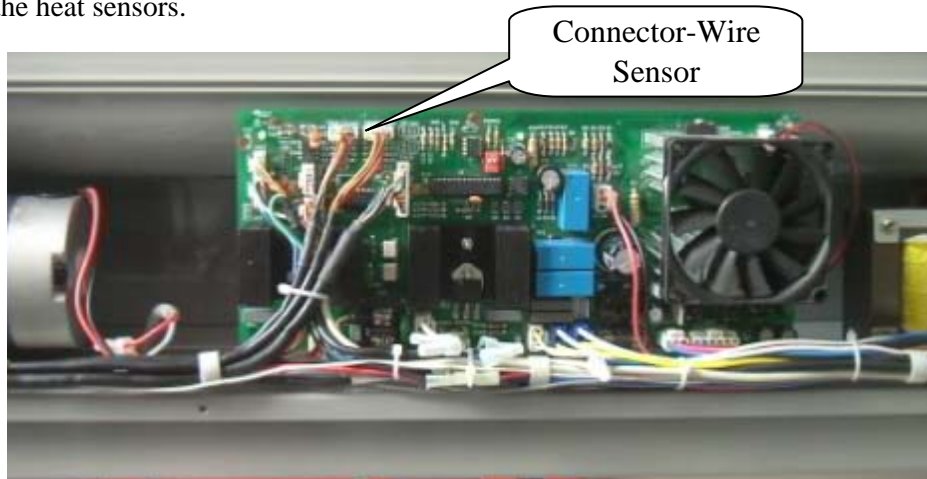
2.2) Rollers Over Heating

CAUSES

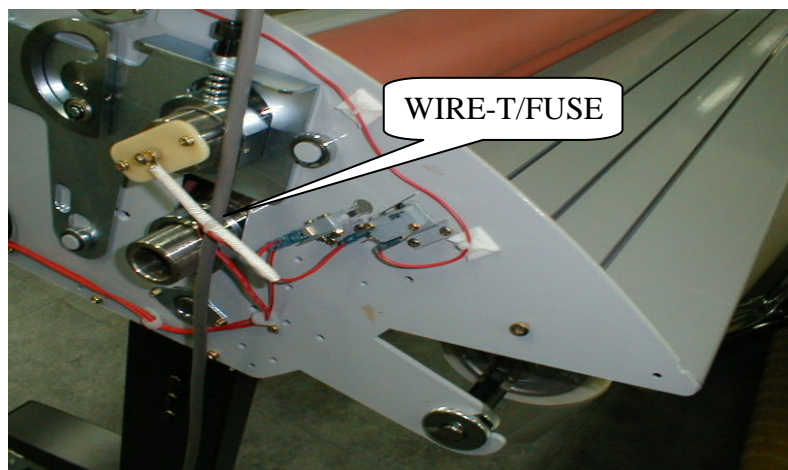
1. Lower and upper heat sensors are reversed on the PCB Main.
2. Defective T/Fuse wire.
3. Defective heater.
4. Defective main PCB.

MEASURES

1. Wires for lower and upper heat sensors are reversed on the main PCB.
 - a. Reverse the heat sensors.



2. Defective T/Fuse wire.
 - a. Replace the T/Fuse wire located on the left-hand side.



3. Defective heater.
 - a. Test continuity of the heater. If it fails, replace the heater.
 - b. Glass tube that surrounds heating coil is broken – replace the heating element.
4. Defective Main PCB.
 - a. Replace the PCB Main.

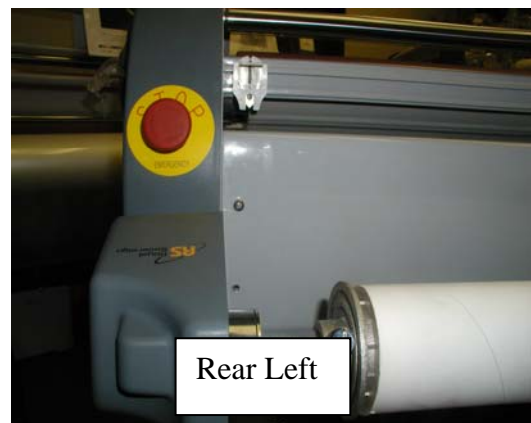
2.3) Rollers Not Running

CAUSES

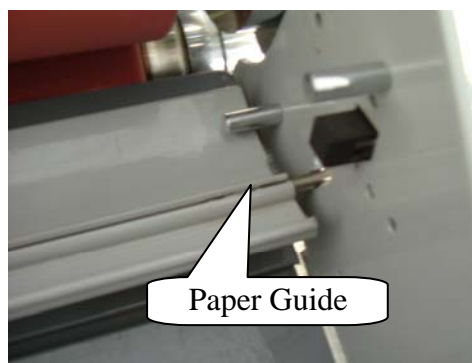
1. No power to the unit.
2. Emergency switch is engaged.
3. Disengaged Paper Guide switch.
4. Opened safety cover.
5. Opened Front Table Switch.
6. Film is jammed on the rollers.
7. Disconnected motor wire.
8. Blown motor fuse.
9. Defective main motor.
10. Defective main PCB.

MEASURES

1. No power to the unit.
 - a. Make sure the power plug is connected to the proper source of outlet (220V, 15Amp, & single phase).
2. Emergency switch is engaged.
 - a. Disengage the emergency switches located on the front and on the rear of the machine by rotating the knob clock-wise.



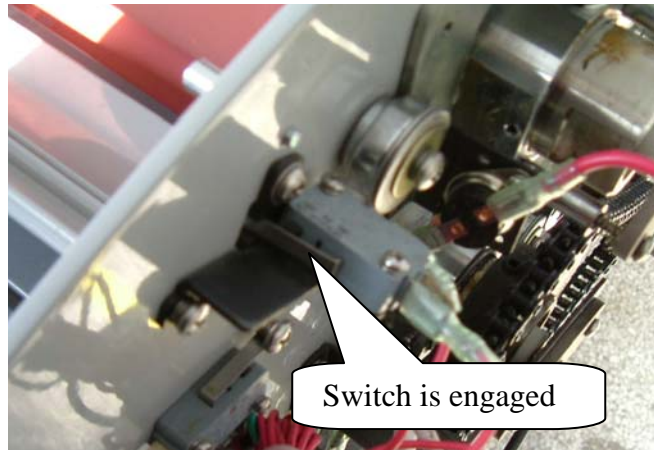
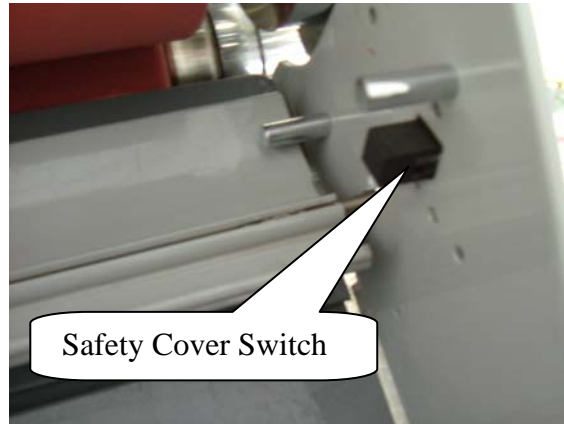
3. Disengaged Paper Guide switch.
 - a. Properly position the paper guide to engage the switch.



4. Opened safety cover.

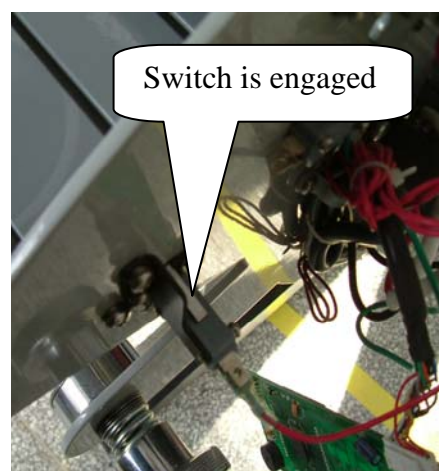
- a. Close the safety cover and double check to insure that the safety cover switch is engaged.

Note: By closing the safety cover, it engages the safety cover switch.



4. Opened Front Table Switch.

- a. Properly position the front table to engage the switch.

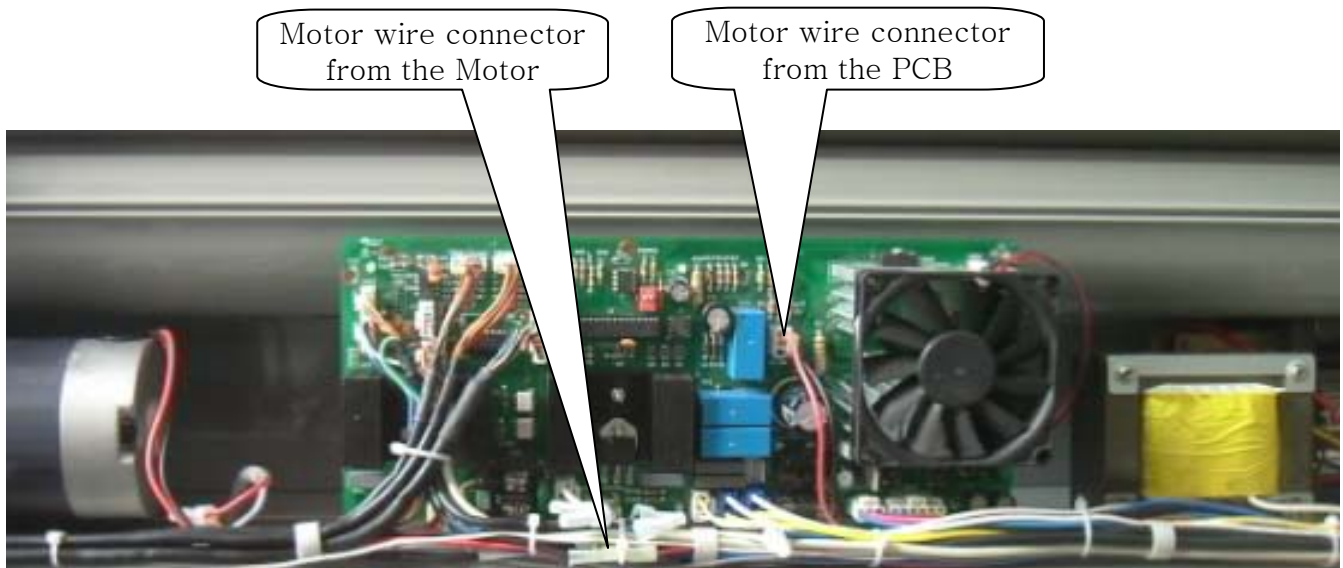


5. Film is jammed on the rollers.

- a. Un-jam the film using a combination of the pressure lever and reverse button.

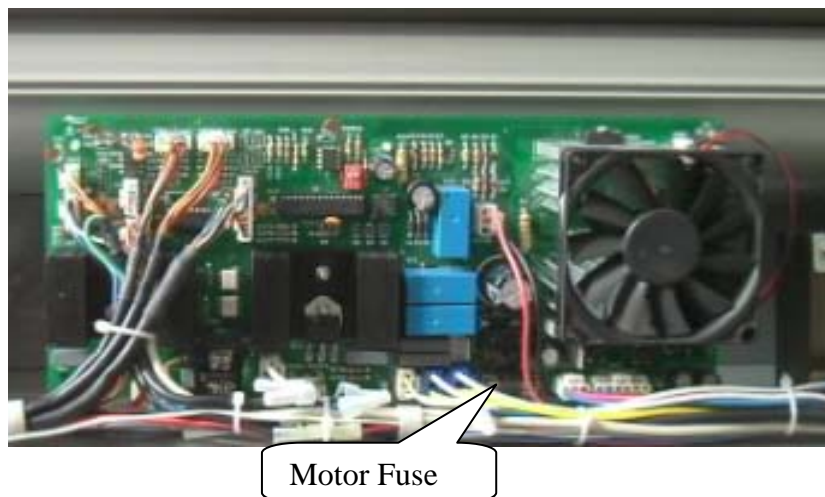
6. Disconnected motor wire.

- a. Check the motor wire connection in both locations.



7. Blown motor fuse.

- a. Replace the motor fuse located above the main power switch.



8. Defective main motor.

- a. Replace the main motor.

9. Defective main PCB.

- a. Replace the main PCB.

2.4) No Main Power

CAUSES

1. No electricity.
2. Blown main fuse.
3. Disconnected main power wires.
4. Defective transformer.

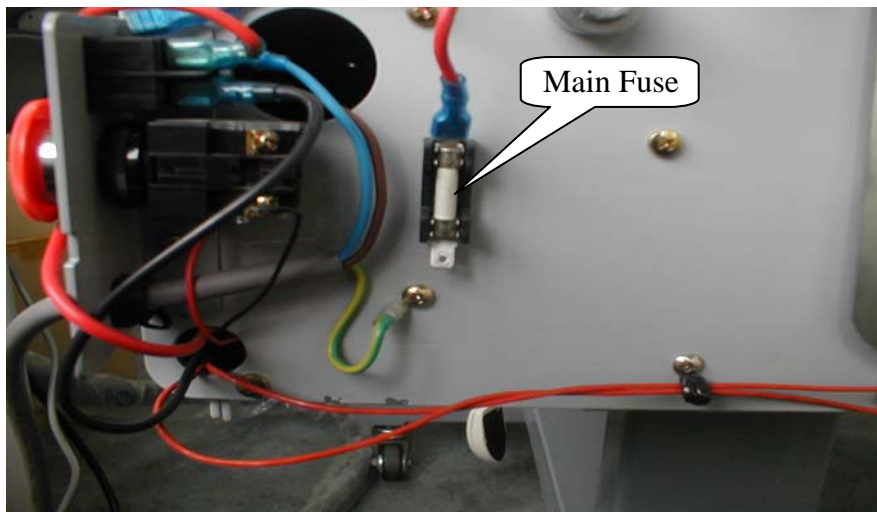
MEASURES

1. No Electricity.

- a. Double check to insure that you have electricity from your outlet.
- b. Check the circuit breaker.
- c. Double check that source of power is 220V, 15Amp, and single phase.

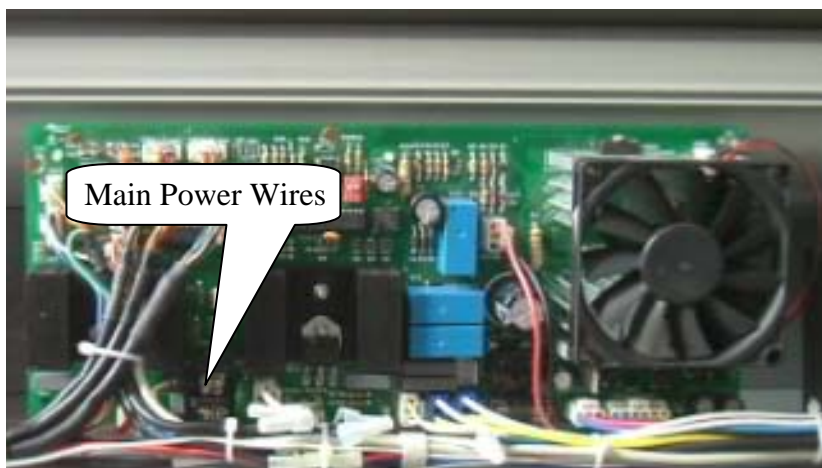
2. Blown main fuse.

- a. Replace the main fuse located above the main power switch.



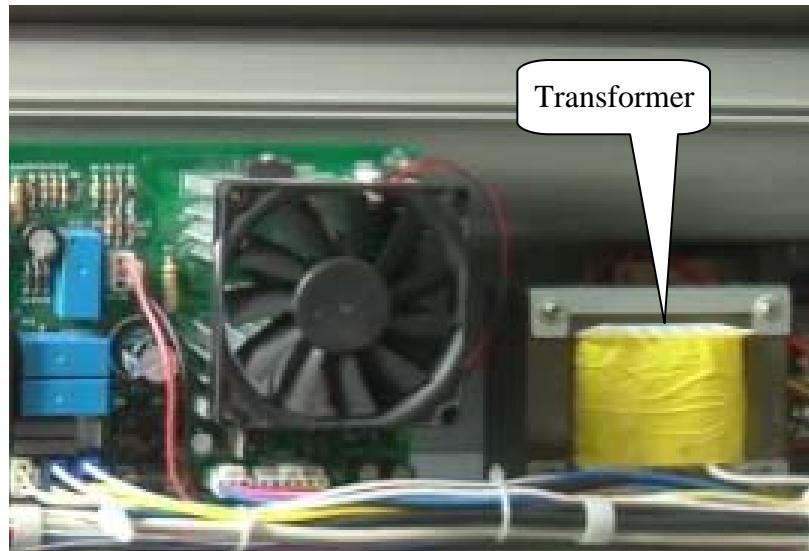
3. Disconnected main power wires.

- a. Check that the main power wires are properly connected.



4. Transformer is defective

- a. Replace the transformer.



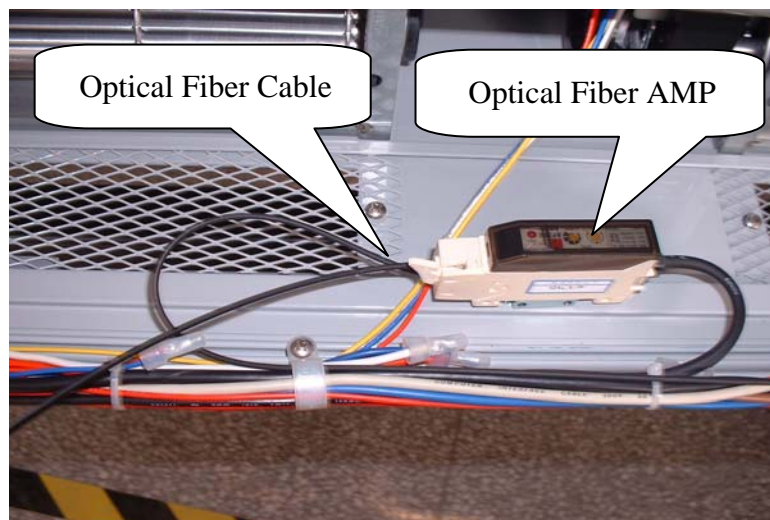
2.5) Count Sensor Not Working.(Option)

CAUSES

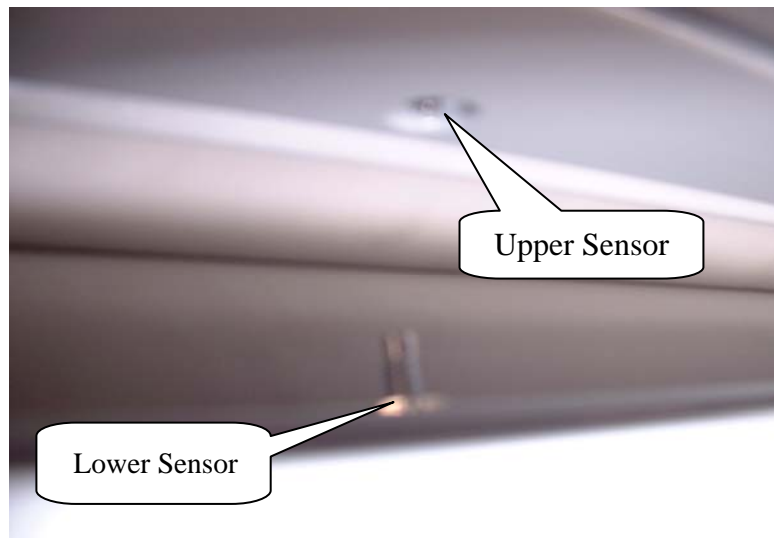
1. The optical fiber cable is not connected with optical fiber AMP.
2. The upper sensor is aligned properly with lower sensor.
3. The counter wires are not connected on the Main PCB.
4. Main PCB is defective.
5. The count needs adjustment.

MEASURES

1. The optical fiber cable is not connected with optical fiber AMP.

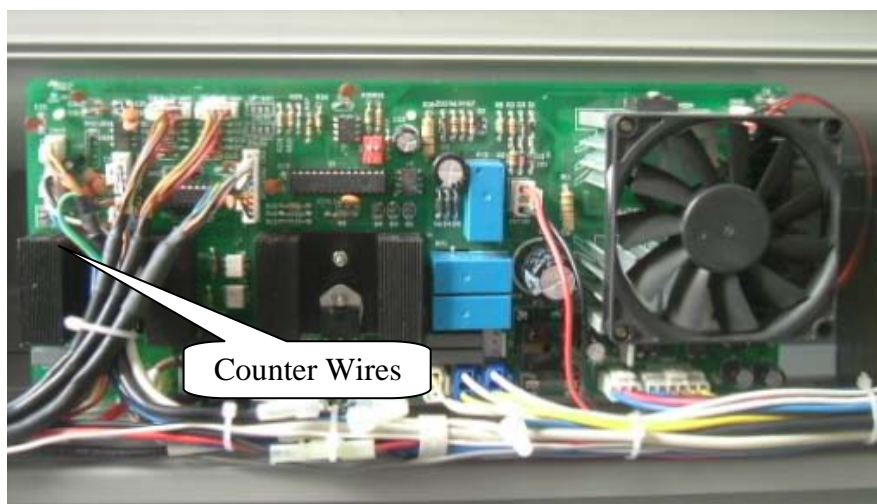


2. The upper sensor is aligned properly with lower sensor.



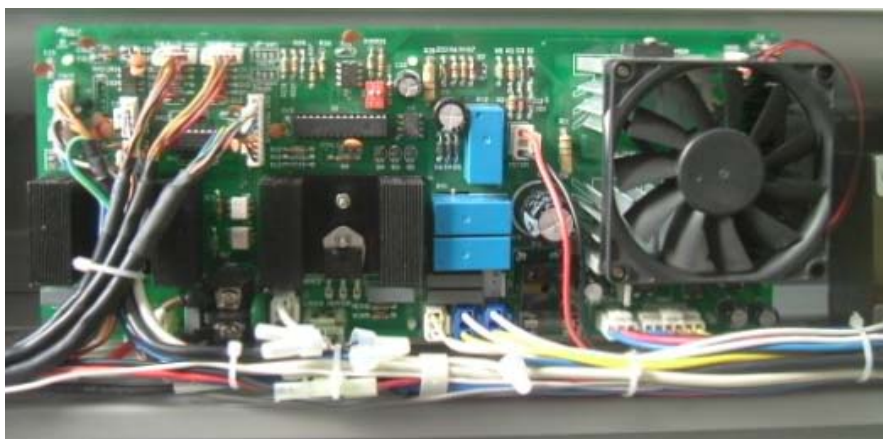
3. The counter wires are not connected on the Main PCB.

a. Ensure that the counter wires are connected to the Main PCB.



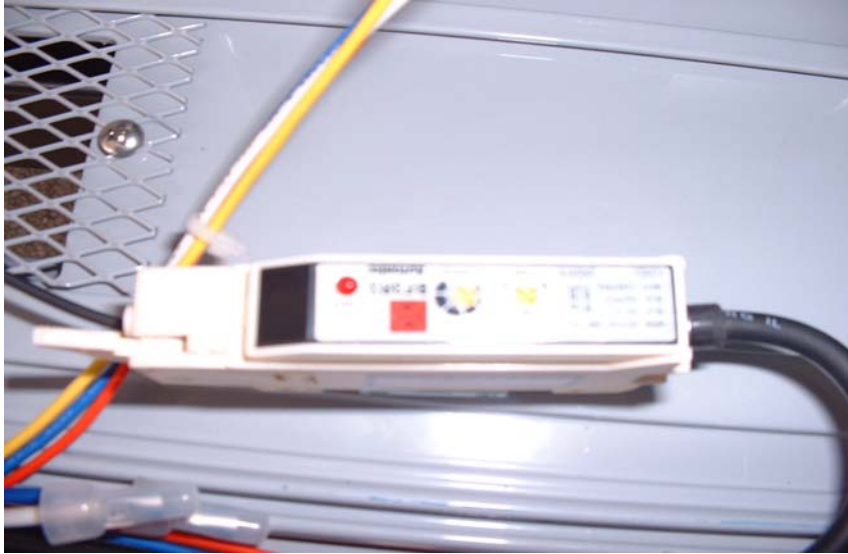
4. Main PCB is defective.

a. Replace the Main PCB.



5. The count needs adjustment.

a. Please see below for adjustments.



Adjusting the Counter Sensor

NO.	Through beam	Adjusting	VR	
			Coarse	Fine
1	Initial setting	Fix VR(Coarse) at ON position with turning right slowly when it is the status of the received light.		
2	Received light 	Fix VR(Coarse) at ON position with turning right slowly when it is the status of the received light.		
3	Received light 	Turning VR(Fine) until it is OFF toward(-), and turning until it is ON toward(+) again, then confirm that this will be A position.	Coarse VR is not required to adjust afterwards.	
4	Interrupted light 	And then turning VR(Fine) until it is ON toward(+), and turning until it is OFF toward(-) again in state of shading light. Then confirm that this position will be B position. (when it will not be ON.max. position will be B.		
5		Fix it at middle of A and B position. This will be the best position to set.		
6	Received light 	If it cannot adjust as above method. set VR(Fine) at max. position toward(+), then execute again.		

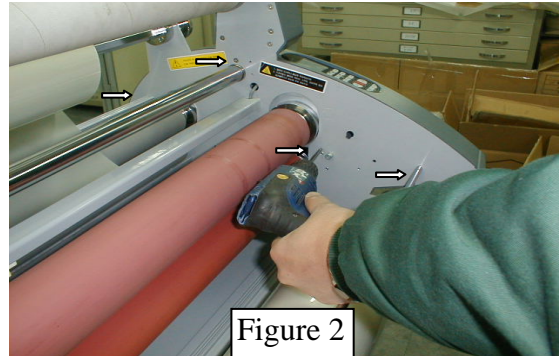
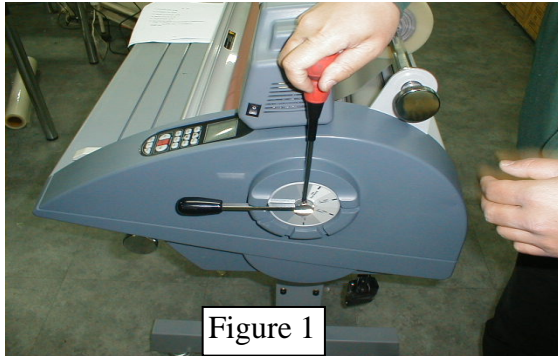
3. Replacing Parts

Note: While replacing parts:

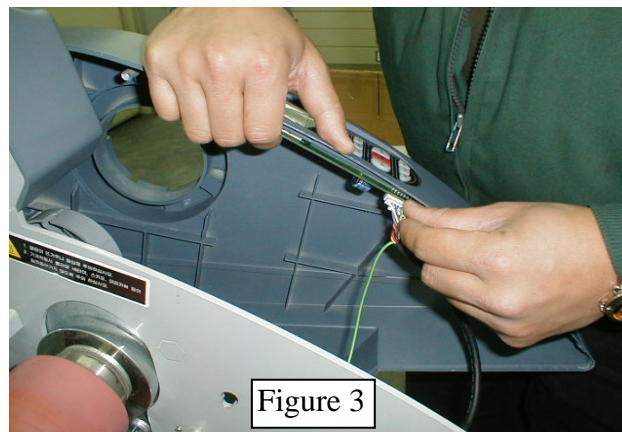
- a. Make sure the power plug is unplugged from the power outlet.*
- b. Open both side covers and rear cover.*

3.1 Replacing the Right Cover.

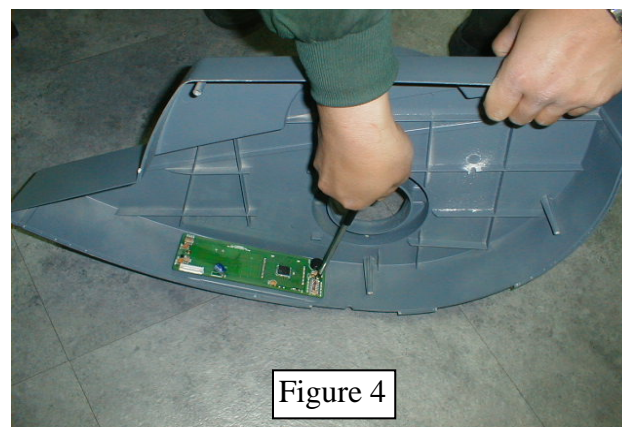
- a. Take out the pressure lever (Figure 1) and four cover screws using Phillips screw driver (Figure 2).



- b. Pull out the male control panel connector from the Sub-PCB. Figure 3



- c. Loosen two screws from Sub-PCB and install on to new Right Cover. Figure 4



- d. Follow the reverse order to assemble the Right Cover back.

3.2 Replacing the Left Cover

- a. Replace the Left Cover by loosening four Left Cover screws.

3.3 Replacing Rear Cover

- a. Take off the left and right covers.
- b. Take out the seven screws from the back cover. Figure 5
- c. Carefully slightly lift up the cover and slowly pull towards you. Figure 6
(Note: The Counter Sensor Wire is attached to the cover).(Option)
- d. Open the Paper Counter latch and pull the black wire from the paper counter sensor to detach from the unit.(Option)

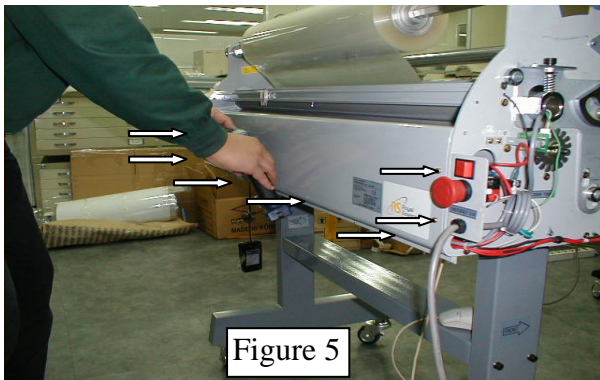


Figure 5

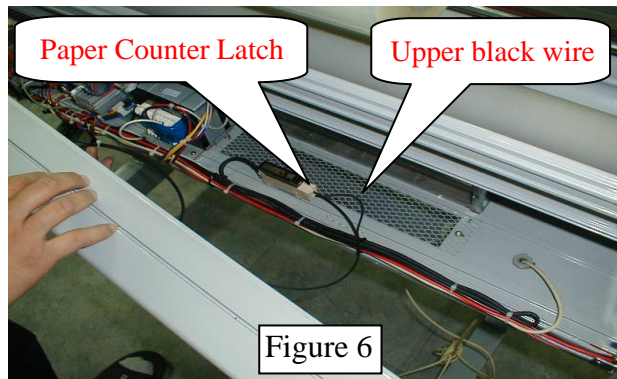
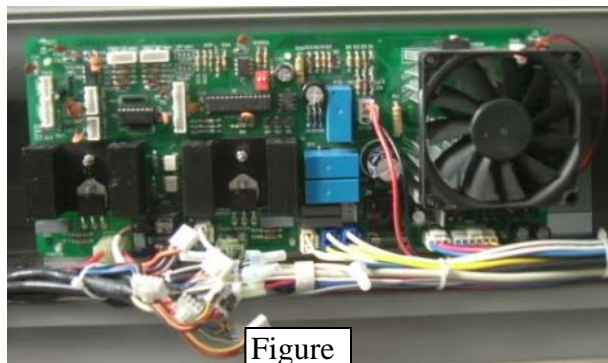


Figure 6

3.4 Replacing the Main PCB

- a. Remove the rear cover and label all the wires before unplugging from the Main PCB.
- b. Detach the Main PCB from 6 white plastic holders. Figure 7
- c. Replace the board with new PCB and connect all the wires.



Figure

3.5 Replacing the Sub-PCB

- a. Refer to “Replacing Right Cover”.

3.6 Replacing the Heaters

Note: Cotton or surgical gloves are recommended while handling the heater assembly.

- Disassemble Right and Left Covers (Refer to ‘**Replacing Right Cover**’ and ‘**Replacing Left Cover**’).
- Take out the heater brackets on each side by loosening the nuts and screws (Figure 8, 9, & 10).

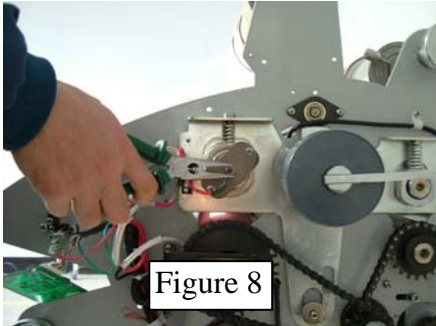


Figure 8

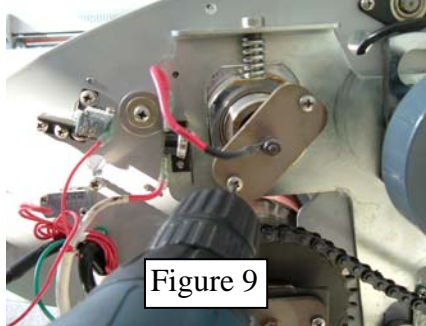


Figure 9

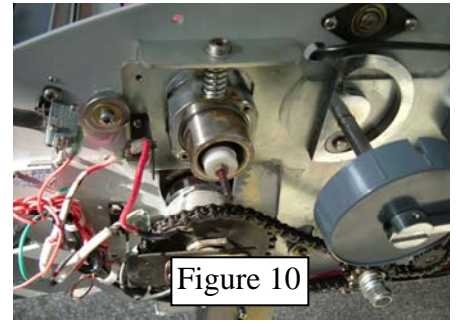


Figure 10

- Take out the broken heater. Figure 11

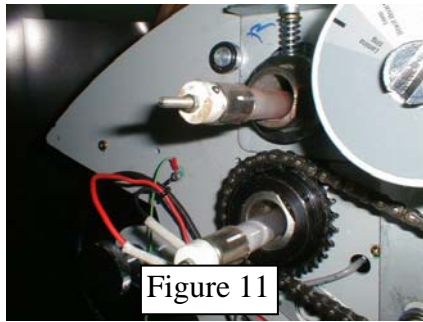


Figure 11

Note:

- When inserting the heater into the roller, rotate the heater slightly and push the rod in gently.
 - Use an air blower to blow out the broken pieces of heating rod.
- (Please ensure that no one is standing on the other side.)

3.7 Replacing the Cross Cutter

- Disassemble the nut from the Frame-Cutter.
- Unfasten the spring from the cutter.
- Change the Cutter.
- Assemble the Cutter by reversing the above steps.

4. Adjustments

4.1 Adjusting Take-up Shaft Speed

CAUSES:

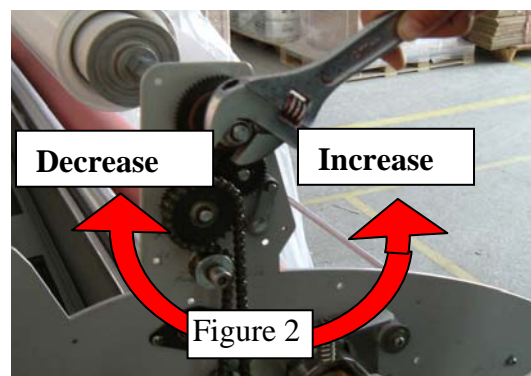
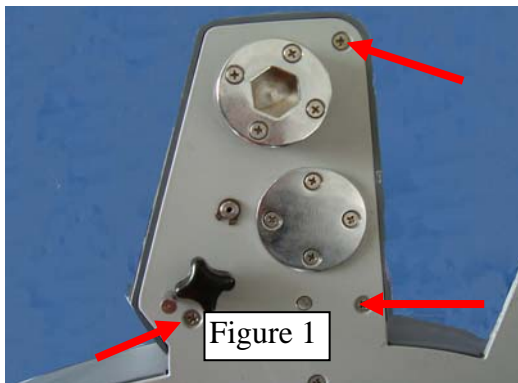
1. Main rollers and take-up shaft speed is not synchronized.

MEASURES:

1. Take off the take up motor cover. Figure 1
2. Loosen (increases speed) or tighten (reduces speed) the bolt using 11/16" or 17mm wrench.

Note: Loosen three screws as shown in Figure 1 to get to the adjustable take-up shaft speed bolt.

Figure 2



4.2 Adjusting Front and Rear Rollers

Pressure

- Use 5/16" or 8mm Allen wrench to adjust the roller pressure:

C.W – Increase pressure.

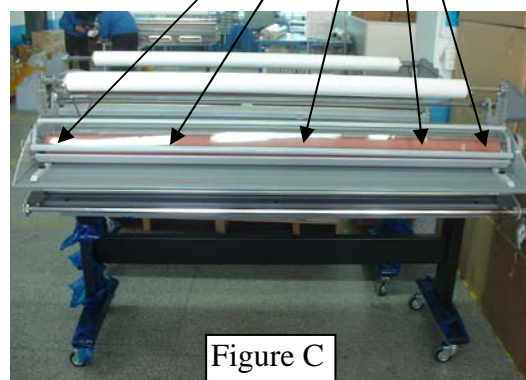
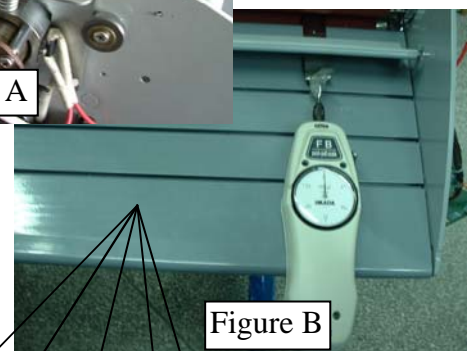
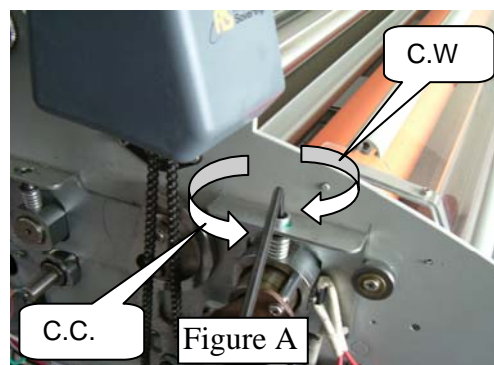
C.C.W – Decrease pressure.

1. Using *Push-Pull Scale*, measure 5 spots as shown on Figure B & C: Front roller should be 2~3 on Gauge

when the machine is running, check that the top and the bottom films are fed in without any wrinkles.

3. *Laminating Test* – Laminate samples with different thickness of substrates.

4. Check above steps 2 through 3 with 1.5mil & 5mil films.



5. Installing Options

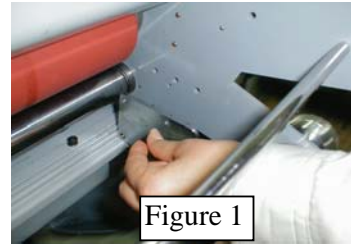
Note:

These options are to be installed by an authorized RS reseller.

1. Installing the Front Feeder

- a. Install the Left and Right Front Feed option on the inside of the front frames using four 9/16" hexagon bolts on each side.

Figure 1



2. Installing the Rear Rewinder

- a. Remove the left and right covers by using a Phillips screwdriver (four screws on each side cover) (Figures 2 & 3).



Figure 2



Figure 3

- b. Remove the lever knob screw and lever (Figure 4).

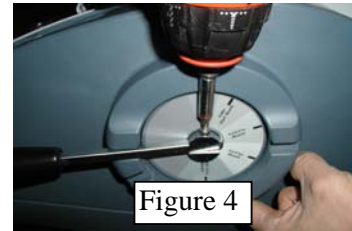


Figure 4

- c. Remove the rear cover by removing all 10 screws (4 top, 4 bottom, and 1 on each side) (Figure 5 & 6).

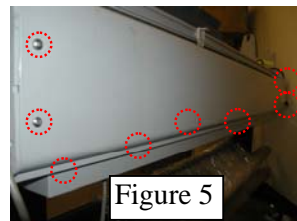


Figure 5

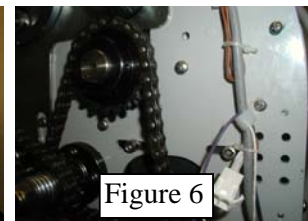


Figure 6

- d. Disassemble the power switch bracket and place the left rewriter outside of the frame; fasten with round head 5/16 (9mm) Phillips screws (included in the option kit). Then, reinstall the power switch bracket (Figure 7).

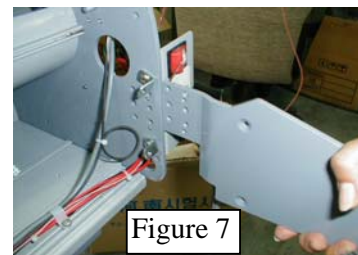


Figure 7

- e. Install the right rewind on the outside of the frame and connect the motor wire connection to rear wire (Figures 8 & 9).
- f. Reinstall the rear cover.
- g. Reinstall the side covers.
- h. Reinstall the lever knob and screw.

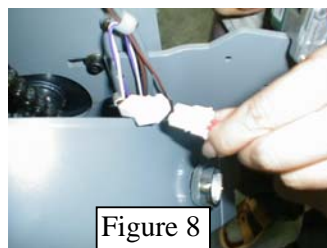


Figure 8

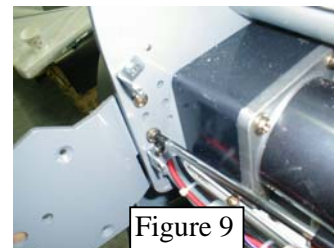


Figure 9

6.2 RSH-1651 Parts List

RSH-1651

NO	Part N/O	Part Name	SPEC.	Q'TY
1	13500X001A	CASTER-STAND1	20-30S-B3-SBB-TG KYUNG CHANG(W/T BRAKE)	2
2	13500X002A	CASTER-STAND2	20-30S-B3-SBB-TG KYUNG CHANG(W/O BRAKE)	2
3	WSB16038D2	WASHER-SPRING	SWRH Φ 16.2*3.8T SUS27	4
4	212LR1004A	STAND-BASE	STKR 120*50*2.3T	2
5	212LR1003A	STAND-FRAME	STKR 3.2T	2
6	212LR1005C	STAND-CENTER	STKR 120*50*2.3T	1
7	BHE08012D2	BOLT	HEXAHEAD M8*12 SUS27	14
8	WSB08020D2	WASHER-SPRING	SWRH Φ 8.2*2T SUS27	24
9	NHB08050D2	NUT	NEXAGON M8	10
10	BHE08100D2	BOLT	HEXAHEAD M8*100 SUS27	8
11	212LR2003A	STAND-TOP	STKR 1635*330 PANTONE COOL GRAY 8U	1
12	013LR3006A	FRAME-BASE	AL6063 PANTONE 421U	1
13	BHE06020D2	BOLT	HEXAHEAD M6*20SUS27	14
14	WSB06015D2	WASHER-SPRING	SWRH Φ 6.2*1.5T SUS27	10
15	211003002B	BLOWER-ASS'Y	PF-RS6225	3
16	MBC04008D2	SCREW BH	M4*8 SUS27	66
17	WSB04010D2	WASHER-SPRING	Φ 4.1*1.0T SUS27	120
18	141LR3001B	BRACKET-PCB	SECC 1.6T ZWP5	1
19	23200X001A	SUPPORT-BRACKET PCB	DASS-9N NYLON	6
20	350LR3021A	PCB-MAIN ASS'Y	FR-4	1
21	34000S008A	POWER TRANSFORMER	AC230V/50Hz,S1 24V/5.0A	1
22	MBC04010D2	SCREW-BH	M4*10 SUS27	10
23	214LR3003B	MESH-FRAME,F	SUS	3
24	MBC04006D2	SCREW BH	M4*6 SUS27	40
25	013LR2045A	FRAME-L	SPCC 4.5T PANTONE 421U	1
26	141LR4007C	BRACKET-SWITCH,EU	SPCC 2T PANTONE 421U	1
27	36400X002B	SWITCH-MAIN	8216 B/R I/O	1
28	23300X001A	BUSHING-CORD,EU	7NR32 DONG-A	1
29	380LR4001A	POWER CORD	AC 250V 15A;KKP-4819R	1
30	36600X002A	FUSE BLOCK	FB66	1
31	MFC04008D2	SCREW FH	M4*8 SUS27	9
32	325000X005	FUSE MAIN	65TS AC250V 20A	1
33	013LR2046A	FRAME-R	SPCC 4.5T PANTONE 421U	1
34	MBC05030D2	SCREW BH	M5*30 SUS27	36
35	WSB05013D2	WASHER-SPRING	Φ 5.1*1.3T SUS27	68
36	013LR2009B	FRAME-FRONT	AL6063 PANTONE 421U	1
37	MFC05018D2	SCREW FH	M5*18 SUS27	6
38	141LR4036A	BRACKET-SENSOR	SPCC 1.5T	1
39	021LR3003A	CASE-SENSOR,UP	ABS 94VO AF-312 IVORY	2
40	021LR3004A	CASE-SENSOR,LO	ABS 94VO AF-312 IVORY	2
41	313LR3001A	SENSOR-ASS'Y		2
42	381LR4027E	WIRE SENSOR	2464 24AWG 3PAIR(6C)SB	2
43	MBC04018D2	SCREW BH	M4*18 SUS27	6
44	013LR3005A	FRAME-CENTER	AL6063 PANTONE 421U	1
45	MBC05018D2	SCREW BH	M5*18 SUS27	14

NO	Part N/O	Part Name	SPEC.	Q'TY
46	013LR2012B	FRAME-SENSOR	AL6063 PANTONE 421U	1
47	MFC04018D2	SCREW FH	M4*18 SUS27	4
48	013LR3002B	FRAME-CUTTER	AL6063 PANTONE 421U	1
49	023LR3003A	KNOB-CUTTER,C	ABS 94VO AF-312 IVORY	1
50	140LR3001A	HOLDER-CUTTER,C	ABS 94VO AF-312 PANTONE 420U	1
51	213LR4001A	CUTTER-CROSS	STS420J2 1T	1
52	138LR4001A	SPRING-CROSS,CUTTER	SWRH Φ 0.3 ZWP5	1
53	NHB03024D2	NUT	HEXAGON M3 2 SORT SUS27	5
54	MPC03006D2	SCREW PH	M3*6 SUS27	9
55	015LR3005B	BAR-IDLE,LO	S45C Φ 40 Cu+ Ni+ Cr	1
56	12200X020A	BEARING-IDLE,LO	GME # 6004Z	2
57	141LR4012A	PLATE-BEARING	SECC 2T ZWP5	4
58	015LR3005A	BAR-IDLE,UP	S45C Φ 30 Cu+ Ni+ Cr	1
59	12200X016A	BEARING-IDLE,UP	GME # 6001Z	2
60	133LR2007A	ROLLER-LAMI,LO	S45C Φ 96 SNC3	1
61	122LR4022A	BUSH-ROLLER,LAMI LO	S45C Cu+ Ni+ Cr	2
62	12200X012A	DU BUSH	FLANGE 40*25	4
63	12200X014A	DU BUSH	W/O FLANGE 40*10	4
64	131LR4016A	SPROCKET-ROLLER,LAMI	S45C Φ 102.4 32Z	1
65	SKE06010B6	SCREW-SET	M6*10 FZB	1
66	SKE06015B6	SCREW-SET	M6*15 FZB	1
67	131CR4001A	SPROCKET-ROLLER LEFT	S45C 31Z	1
68	SKE04010B6	SCREW-SET	M4*10 FZB	3
69	133LR2007B	ROLLER-LAMI,UP	S45C Φ 95 SNC4	1
70	122LR4007B	BUSH-ROLLER,LAMI UP	S45C Cu+ Ni+ Cr	2
71	133LR2009A	ROLLER-PULL,LO	S45C Φ 60 SNC3	1
72	122LR4010A	BUSH-ROLLER,PULL LO	S45C Cu+ Ni+ Cr	2
73	12200X013A	DU BUSH	FLANGE 25*25	4
74	131LR4015A	SPROCKET-ROLLER,PULL	S45C 16Z	1
75	SKE04015B6	SCREW-SET	M4*15 FZB	2
76	133LR2008A	ROLLER-PULL,UP	S45C Φ 60 SNC3	1
77	122LR4009A	BUSH-ROLLER,PULL UP	S45C Cu+ Ni+ Cr	2
78	12200X015A	DU BUSH	W/O FLANGE 25*10	2
79	120LR3002A	SHAFT-CAM	S45C Cu+ Ni+ Cr	1
80	124LR4002A	CAM-ROLLER	S45C Cu+ Ni+ Cr	2
81	144LR4001A	CLAMPER-LEVER	S45C Cu+ Ni+ Cr	1
82	SKE05015B6	SCREW-SET	M5*15 FZB	37
83	SKE05010B6	SCREW-SET	M5*10 FZB	1
84	021LR3006A	BRACKET-CLAMPER LEVER	ABS 94VO AF-312 PANTONE 431C	1
85	125LR4003A	LEVER-PRESSURE	S45C Cu+ Ni+ Cr	1
86	023LR4001A	KNOB-LEVER	NYLON BLK	1
87	032LR4010A	SHEET-PRESSURE,EU	PC 0.3T	1
88	141LR2011A	PLATE-PRESSURE,L	SPCC 3T ZWP5	1
89	122CR4002A	BUSH-CAM	S45C	2
90	RC000800C8	SNAP RING	STW-8 WON IL	2
91	111LR4014A	BOLT-PRESSURE	MSWR3 M10*P1.5 SUS27	4
92	WPB06015D2	WASHER-PLAIN	Φ 6.5*15*1.5 SUS27	4
93	138LR4008A	SPRING-PRESSURE	SWRH Φ 2.6 ZWP5	2

NO	Part N/O	Part Name	SPEC.	Q'TY
94	138LR4003A	SPRING-PRESSURE	SWRH $\phi 3$ ZWP5	2
95	122LR4004A	BUSH-PLATE PRESSURE	S45C Cu+ Ni+ Cr	6
96	RC001500C8	SNAP RING	STW-15 WON IL	3
97	141LR2012A	PLATE-PRESSURE,R	SPCC 3T ZWP5	1
98	363LR4001D	BIMETAL-HEATER	KS-2/KSD N100℃	2
99	WSB03007D2	WASHER-SPRING	$\phi 3.1 \times 0.7$ T SUS27	8
100	223LR2003A	HEATER ASS'Y	FCHW1 33 Ω	2
101	141LR4016A	BRACKET-HEATER	SECC 2T	2
102	MBC05010D2	SCREW BH	M5*10 SUS27	4
103	141LR4011A	BRACKET-HEATER,STOPPER	PA66MG-VO	4
104	NHB05032D2	NUT	HEXAGON M5 2SORT SUS27	4
105	MBC04045D2	SCREW BH	M4*45 SUS27	4
106	142LR4001A	SPACER-HEATER,BKT	S45C $\phi 4.6 \times \phi 8 \times 24$ Cu+ Ni+ Cr	4
107	WPB04008D2	WASHER-PLAIN	4.3*8*0.8 SUS27	9
108	138LR4014A	SPRING-HEATER	STS-304-WPA $\phi 0.6$	4
109	21000S029A	MOTOR-MAIN	S9D60-36BH(OA87) DC 36V 60W 75:1 16.6rpm	1
110	131LR4004A	SPROCKET-MOTOR	S45C 13Z	1
111	136LR4004A	CHAIN-ROLLER	#35 P9.525*58	1
112	136LR4004B	CHAIN-ROLLER	#35 P9.525*42	1
113	140LR4005A	HOLDER-SLIP	S45C O.D 54 10T BEARING #60002	1
114	140LR4006A	HOLDER-SLIP(IN)	S45C O.D 54 10T BEARING #60002	1
115	12200X001A	BEARING-IDLE	12200*001A	2
116	120LR4003A	SHAFT-SLIP	S45C $\phi 12$	1
117	131LR4013A	SPROCKET-SLIP	S45C $\phi 44$ 13Z	1
118	147LR4007A	PAD-SLIP	$\phi 24 \times \phi 12 \times 4$ T	1
119	131LR4014A	SPROCKET-SLIP IN	S45C $\phi 44$ 13Z	1
120	WPB13016D2	WASHER-PLAIN	13*22.6*1.6 SUS27	2
121	12200X005A	BEARING-RADIAL TRUST	NTB 12*26	1
122	138LR4006A	SPRING-SLIP	SWRH $\phi 3.5$ ZWP5	2
123	112004001B	NUT	HEXAGON LOCK TYPE NYLON M12*1.75 SUS27	1
124	RC001000C8	SNAP-RING	STW-10 WON IL	3
125	141LR4005A	PLATE-SHAFT,FILM	SPCC 2.3T Cu+ Ni+ Cr	3
126	140LR4002A	HOLDER-SHAFT,T	S45C Cu+ Ni+ Cr	1
127	12200X022A	BEARING-RADIAL TRUST	NTB 15*28	4
128	130LR4002A	GEAR-TAKE UP	S45C $\phi 53 \times 53$ Z	1
129	147LR4009A	PAD-SLIP	LEATHER $\phi 36 \times 1.5$ T	1
130	141LR4006A	PLATE-SLIP	SECC $\phi 36 \times 2$ T	1
131	112004001C	NUT	HEXAGON LOCK TYPE NYLON M10*1.25SUS27	1
132	140CR4001A	HOLDER-TAKE,UP 2	S45C Cu+ Ni+ Cr	1
133	130CR4001A	GEAR-MIDDLE	S45C $\phi 48 \times 23$ T/ $\phi 40 \times 40$ Z	1
134	12200X003A	BEARING	NSK698Z(8.0*19*6.0)	2
135	122LR4006A	BUSH-PULLEY	S45C Cu+ Ni+ Cr	2
136	134LR4001A	PULLEY-CHAIN	S45C Cu+ Ni+ Cr	2
137	BHE08045D2	BOLT	HEXAHEAD M8*45 SUS27	2
138	140LR4012A	PULLEY-CHAIN	MC NYLON	1
139	BHE08050D2	BOLT	HEXAHEAD M8*50 SUS27	1
140	141LR4051A	GEAR-CAM	SPCC+ S45C	1
141	130LR4009A	GEAR-TAKE UP MIDDLE	S45C $\phi 34 \times 34$ Z	1

NO	Part N/O	Part Name	SPEC.	Q'TY
142	12200X035A	DU BUSH	φ8*8 FLANGE	1
143	141LR4052A	KNOB CAM	SPCC+ S45C	1
144	RE000600C8	E-RING	ETW-6 WON IL	1
145	023LR4002A	KNOB-BOLT GUIDE	PHENOL BLK	3
146	136CR4001A	CHAIN-TAKE UP	#25 156E	1
147	120LR4001B	SHAFT-TABLE	S45C φ10 Cu+ Ni+ Cr	1
148	014LR1004B	TABLE-FRONT	AL6063 PANTONE 421U	1
149	141LR4043A	FRONT TABLE SAFETY LEVER	SPCC 1.5T	1
150	MFC04006D2	SCREW FH	M4*6 SUS27	10
151	145LR3001A	GUIDE-DOCUMENT	ABS 94-VO AF-312 PANTONE 420U	2
152	111LR4006A	BOLT-GUIDE	S45C SNC3 4*22.5	2
153	141LR4045A	BRACKET LIMIT SWITCH	SPCC 2.0T	2
154	36400X014B	SWITCH-MICRO SAFETY COVER	16(4)A 250V AC 25T 85μ	3
155	021LR4001A	LIMIT SWITCH COVER	PP	2
156	MBC03014D2	SCREW BH	M3*14 SUS27	4
157	013LR2013A	FRAME-GUIDE,PAPER	AL6063 PANTONE 421U	1
158	111LR4015A	BOLT 1-PAPER GUIDE	S45C Cu+ Ni+ Cr	1
159	111LR4016A	BOLT 2-PAPER GUIDE	S45C Cu+ Ni+ Cr	1
160	140LR4003A	HOLDER-SAFETY COVER	S45C Cu+ Ni+ Cr	6
161	021LR3005A	SAFETY COVER	PC 3T	1
162	141LR4022A	BRACKET-SAFETY COVER	AL6063 PANTONE 421U	1
163	141LR4022D	BRACKET-SAFETY COVER	AL6063 PANTONE 421U	1
164	013LR4003A	SAFETY COVER FRAME-R	SPCC PANTONE 421U	1
165	111LR4009A	BOLT-SAFETY COVER	S45C Cu+ Ni+ Cr	1
166	138LR4010A	SPRING-SAFETY COVER	SWRH φ8.0 ZWP5	1
167	RE000400C8	E-RING	ETW-4 WONIL	1
168	013LR4002A	SAFETY COVER FRAME-L	SPCC PANTONE 421U	1
169	140LR4001A	HOLDER-SHAFT,FILM	S45C Cu+ Ni+ Cr	2
170	147LR4002A	PAD-TENSION	LEATHER 1.5T	2
171	WPB15010D2	WASHER-PLAIN	15.5*28*1.0T SUS27	12
172	138LR4002A	SPRING-FILM,TENSION	SWRH φ3.8 ZWP5	2
173	125LR4001A	HANDLE-TENSION	S45C Cu+ Ni+ Cr	2
174	120LR3004B	SHAFT-FILM,LO	S45C N19 Cu+ Ni+ Cr	3
175	143LR3001A	SUPPOTER-SHAFT,LO	S45C Cu+ Ni+ Cr	3
176	12200X009A	DU BUSH	FLANGE 15*20	3
177	013LR3022A	FILM CORE HOUSING 2"	AL3043	6
178	021LR3008A	2" FILM CORE COVER	ABS	12
179	MBC04025D2	SCREW BH	M4*25 SUS27	40
180	147CR4003A	SILICON ELASTIC	SILICON φ7*160 HS60	20
181	120LR4002B	SHAFT-TAKE,UP	S45C N19 Cu+ Ni+ Cr	2
182	013LR3023A	FILM CORE HOUSING 3"	AL3043	6
183	021LR3009A	3" FILM CORE COVER	ABS	12
184	12200X002A	DU BUSH	FLANGE 10*10	2
185	011LR2003A	COVER-REAR	AL6063 PANTONE 421U	1
186	141LR4009A	BRACKET-REAR COVER	SECC 2T	4
187	021LR2001C	COVER-L	ABS 1/16"V-0 PA-765(94V0 AF-312)	1
188	032LR4008A	SHEET-CUTTER	PC 0.18T	1
189	36400X001A	SWITCH-EMERGENCY	ARE-4R12R	2

NO	Part N/O	Part Name	SPEC.	Q'TY
190	TFH04035D2	SCREW FH	M4*35 SUS27	8
191	021LR2003E	COVER-TAKE UP,L	ABS 1/16"V-0 PA-765(94V0 AF-312)	1
192	TFH04018D2	SCREW FH	M4*18 SUS27	12
193	021LR2002B	COVER-R	ABS 1/16"V-0 PA-765(94V0 AF-312)	1
194	032LR3004A	SHEET-FUNC	PC 0.75T	1
195	023LR3006A	BUTTON-FUNC	KE-9X1 SILICONE	1
196	350LR3022A	PCB-SUB ASS'Y	FR-4	1
197	TPH03006D2	SCREW TAP TITE PH	M3*6 SUS27	2
198	021LR2004B	COVER-TAKE UP,R	ABS 1/16"V-0 PA-765(94V0 AF-312)	1
199	365LR4003A	SWITCH-FOOT ASS'Y	KH-8013 KOINO	1
200	23300X008A	CABLE-GRAND	PG-7 DONG-A	2
201	010LR4001A	ENCODER-LENGTH SENSOR,A	SPCC 0.5T	1
202	141LR4023A	BRACKET-SENSOR PCB	SPCC 2T	1
203	350LR4002A	PCB-LENGTH ASS'Y	FR-4	1
204	141LR4024A	BRACKET-ENCODER	S45C Cu+ Ni+ Cr	1
205	140LR4007A	HOLDER-SENSOR COUNT	SPCC 0.5T	1
206	31400S001A	OPTICAL FIBER CABLE	BF3RX	1
207	31300S002A	OPTICAL FIBER AMP	FT-420-10	1
208	24000X003B	TAPE-TEFLON	TAPE	1
209	141LR4055A	BRACKET-BIMETAL	SPCC 1.5T	1
210	381LR4043A	WIRE-SAFETY S/W	UL1015 AWG #14 1P BLK	2
211	381LR4020B	WIRE-FUSE	UL1015 AWG #14 BRN	1
212	381LR4035A	WIRE-MOTOR	UL1015 AWG #18 BLK/ RED	1
213	381LR4013B	WIRE-POWER S/W	UL1015 AWG #14 BRN/ BLU	1
214	381LR4045A	WIRE-LENGTH	2464 24AWG 3PAIR(6C)SB	1
215	381LR4083A	WIRE-EMER/MOTOR	UL1007 AWG#20	1
216	381LR4030A	WIRE-UP HEATER	UL1015 AWG#14 RED	1
217	381LR4029A	WIRE-LO HEATER	UL1015 AWG#14 BLK	1
218	381LR4044A	WIRE-MAIN	2464 24AWG 5PAIR(10C)SB	1
219	381LR4046A	WIRE-COUNT	UL1007 AWG#20 5P	1
220	381LR4036A	WIRE-T/FUSE UP	133℃ UL1015 AWG#14 RED	1
221	381LR4037A	WIRE-T/FUSE LOW	133℃ UL1015 AWG#14 BLK	1
222	381LR4054A	WIRE-LO HEATER 2	UL1015 AWG#14 RED	1
223	381LR4055A	WIRE-UP HEATER 2	UL1015 AWG#14 BLK	1
224	025LR4001A	CASE-REMOCON ASS'Y	(TOP/BASE/KNOB/SCREW)	1
225	350CR4001A	PCB-REMOCON ASS'Y	FR-4	1
226	381LR4032A	WIRE-REMOTE	2464 24AWG 6C	1
227	013LR3012A	FRAME-REWINDER,L	SPCC 4.5T PANTONE 421U	1
228	013LR3011A	FRAME-REWINDER,R	SPCC 4.5T PANTONE 421U	1
229	130LR4005A	GEAR-TAKE UP	POM GV /30 Φ62*60Z	1
230	141LR4003A	BRACKET-MOTOR	SECC 2T PANTONE 421U	1
231	130LR4004A	GEAR-MOTOR	S45C	1
232	21000S027A	MOTOR-AC	DAG-6202RSI AC 230V 50Hz	1
233	021LR1003A	COVER-TAKE UP 2	ABS 1/16"V-0 PA-765(94V0 AF-312)	1
234	021LR2004A	COVER-TAKE UP,R	ABS 1/16"V-0 PA-765(94V0 AF-312)	1
235	36400X003A	SWITCH-POWER	SRA1001HWBB	1
236	013LR3015A	FRAME-FRONT TENSION L	SPCC 4.5T PANTONE 421U	1
237	013LR3014A	FRAME-FRONT TENSION R	SPCC 4.5T PANTONE 421U	1

NO	Part N/O	Part Name	SPEC.	Q'TY
238	RE001000C8	E-RING	ETW-10 WONIL	3
239	WPB05030H8	WASHER-PLAIN	SPCC 3T*11.8*Φ5 Zn plating	2
240	RIV05013E8	BRINDER RIVET	AL Φ5*18	2
241	WPB15010D2	WASHER-PLAIN	15.5*28*1.0T PZY	12
242	WPB06015A6	WASHER-PLAIN	6.6*12.5*1.6 FZY	12
243	MBC05008D2	SCREW BH	M5*8 SUS27	5

7. Exploded View

7.1 RSH-1151 Exploded View

Frame L

Frame R

Stand Part and Frame-Base

Frame, Roller and Other View

Wire and Options

Front Table、 Safety cover and Shaft Films

7.2 RSH-1651 Explode View

Frame L

Frame R

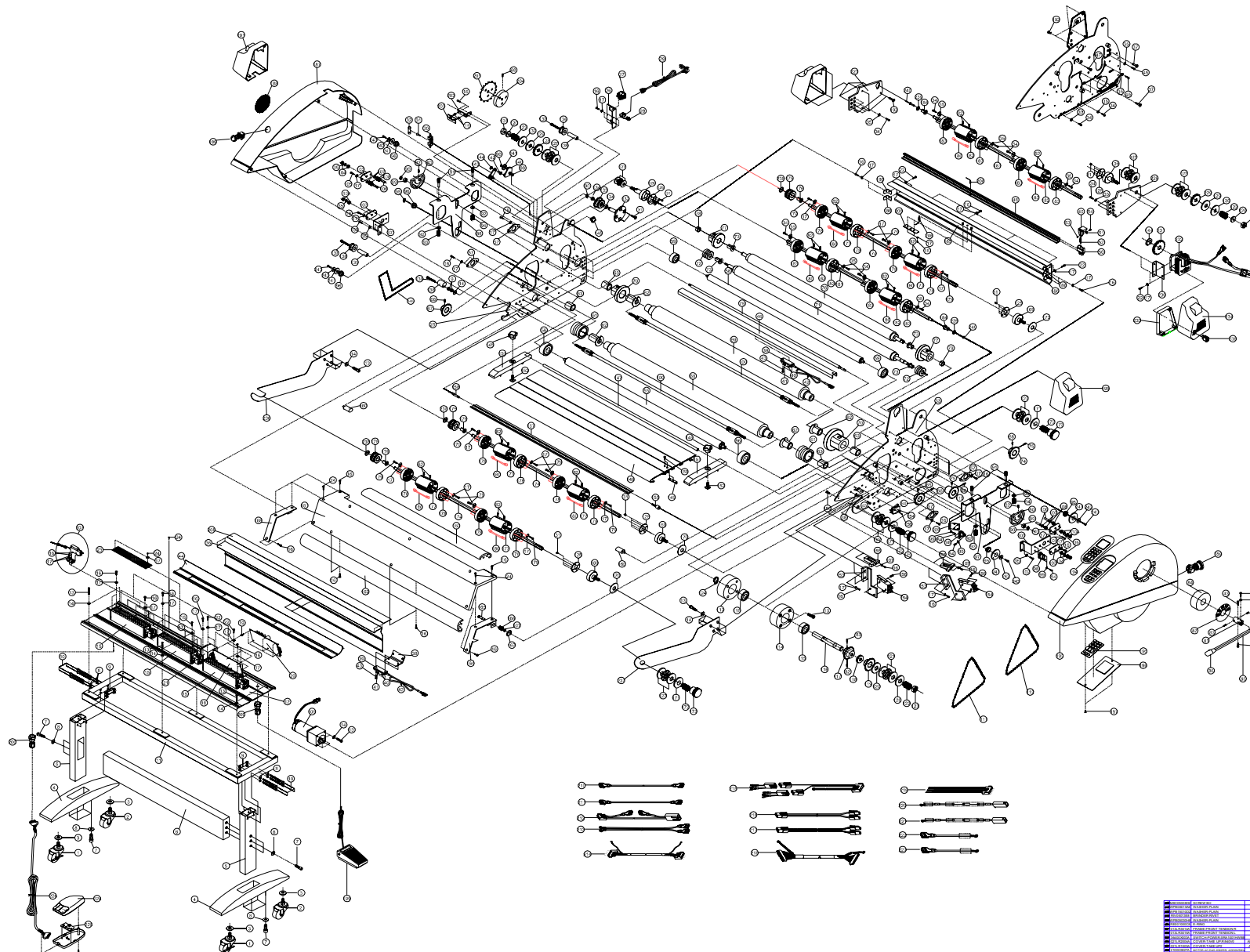
Stand Part and Frame-Base

Frame, Roller and Other View

Front Table、 Safety cover and Shaft Films

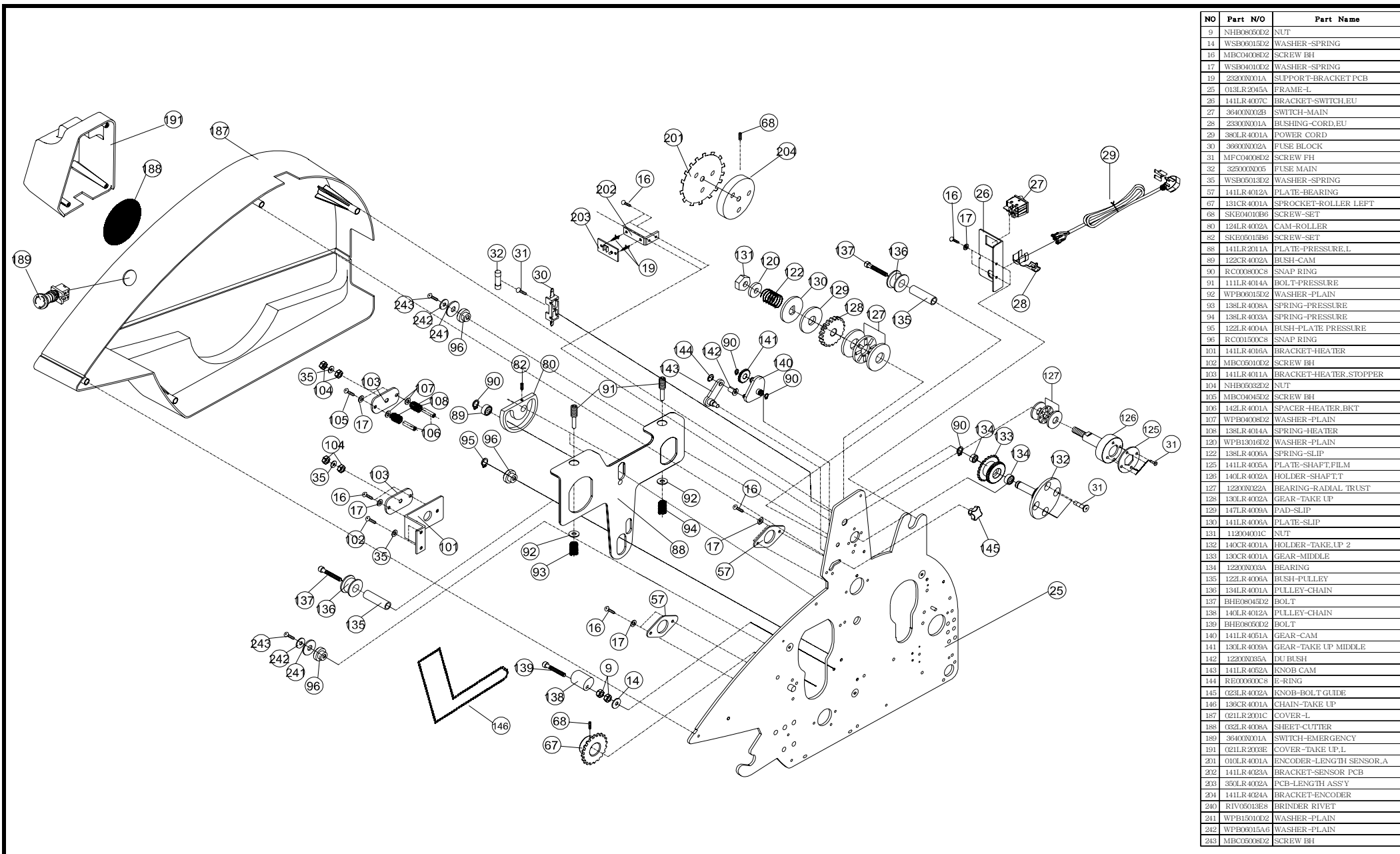
Wire and Options

7.2 RSH-1651 Exploded View

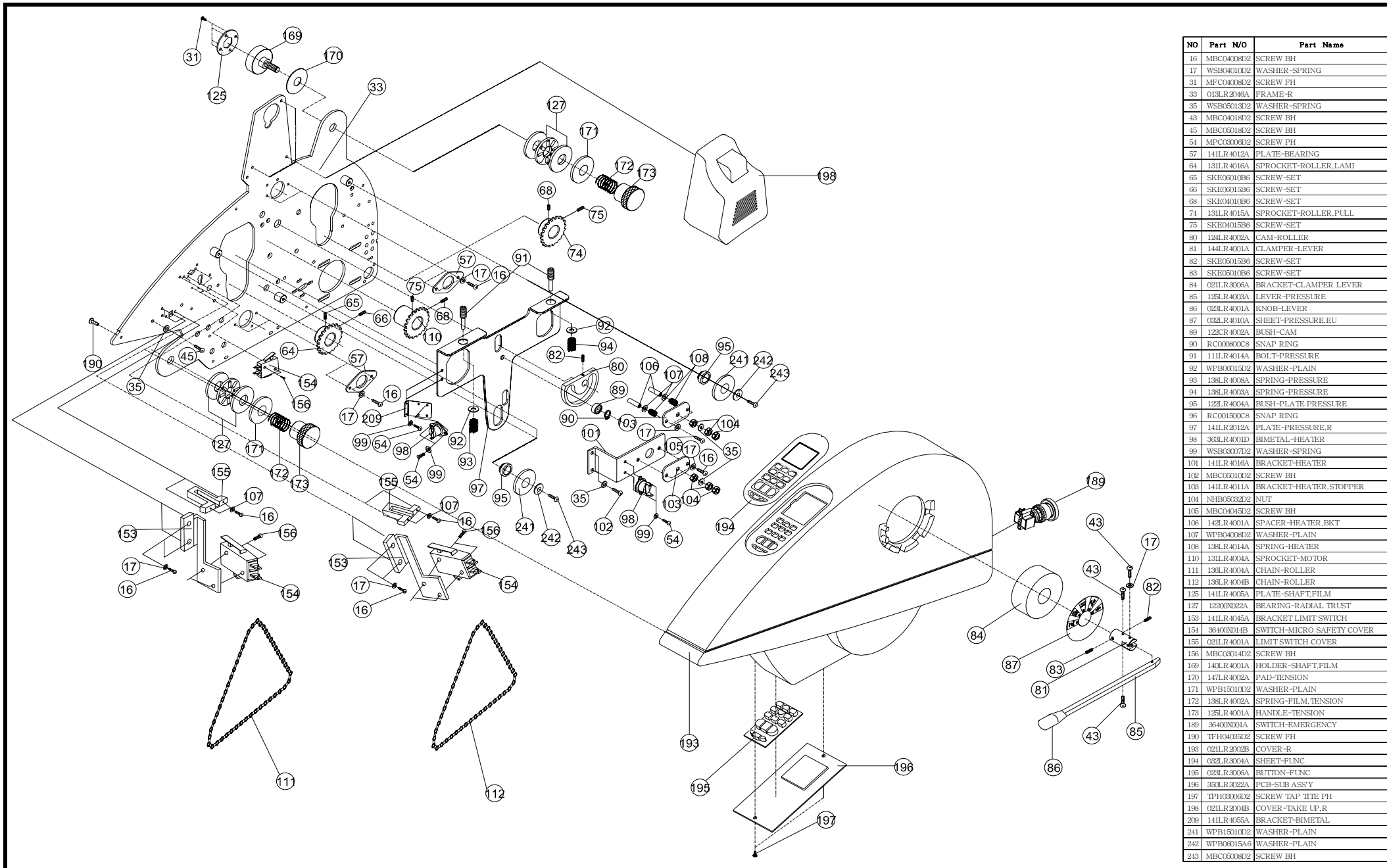


Part No.	Part Name	QTY	Unit	Part No.	Part Name	QTY	Unit
1	Motor	1	EA	101	Control Panel	1	EA
2	Main Frame	1	EA	102	Internal Mechanism	1	EA
3	Motor Mounting Bracket	1	EA	103	Control Panel Mounting Bracket	1	EA
4	Motor Mounting Bolt	2	EA	104	Internal Mechanism Mounting Bolt	2	EA
5	Motor Mounting Nut	2	EA	105	Control Panel Mounting Nut	2	EA
6	Motor Mounting Washer	2	EA	106	Internal Mechanism Mounting Washer	2	EA
7	Motor Mounting Gasket	1	EA	107	Control Panel Mounting Gasket	1	EA
8	Motor Mounting Seal	1	EA	108	Internal Mechanism Mounting Seal	1	EA
9	Motor Mounting Pin	2	EA	109	Control Panel Mounting Pin	2	EA
10	Motor Mounting Screw	2	EA	110	Internal Mechanism Mounting Screw	2	EA
11	Motor Mounting Bolt	2	EA	111	Control Panel Mounting Bolt	2	EA
12	Motor Mounting Nut	2	EA	112	Internal Mechanism Mounting Nut	2	EA
13	Motor Mounting Washer	2	EA	113	Control Panel Mounting Washer	2	EA
14	Motor Mounting Gasket	1	EA	114	Internal Mechanism Mounting Gasket	1	EA
15	Motor Mounting Seal	1	EA	115	Control Panel Mounting Seal	1	EA
16	Motor Mounting Pin	2	EA	116	Internal Mechanism Mounting Pin	2	EA
17	Motor Mounting Screw	2	EA	117	Control Panel Mounting Screw	2	EA
18	Motor Mounting Bolt	2	EA	118	Internal Mechanism Mounting Bolt	2	EA
19	Motor Mounting Nut	2	EA	119	Control Panel Mounting Nut	2	EA
20	Motor Mounting Washer	2	EA	120	Internal Mechanism Mounting Washer	2	EA
21	Motor Mounting Gasket	1	EA	121	Control Panel Mounting Gasket	1	EA
22	Motor Mounting Seal	1	EA	122	Internal Mechanism Mounting Seal	1	EA
23	Motor Mounting Pin	2	EA	123	Control Panel Mounting Pin	2	EA
24	Motor Mounting Screw	2	EA	124	Internal Mechanism Mounting Screw	2	EA
25	Motor Mounting Bolt	2	EA	125	Control Panel Mounting Bolt	2	EA
26	Motor Mounting Nut	2	EA	126	Internal Mechanism Mounting Nut	2	EA
27	Motor Mounting Washer	2	EA	127	Control Panel Mounting Washer	2	EA
28	Motor Mounting Gasket	1	EA	128	Internal Mechanism Mounting Gasket	1	EA
29	Motor Mounting Seal	1	EA	129	Control Panel Mounting Seal	1	EA
30	Motor Mounting Pin	2	EA	130	Internal Mechanism Mounting Pin	2	EA
31	Motor Mounting Screw	2	EA	131	Control Panel Mounting Screw	2	EA
32	Motor Mounting Bolt	2	EA	132	Internal Mechanism Mounting Bolt	2	EA
33	Motor Mounting Nut	2	EA	133	Control Panel Mounting Nut	2	EA
34	Motor Mounting Washer	2	EA	134	Internal Mechanism Mounting Washer	2	EA
35	Motor Mounting Gasket	1	EA	135	Control Panel Mounting Gasket	1	EA
36	Motor Mounting Seal	1	EA	136	Internal Mechanism Mounting Seal	1	EA
37	Motor Mounting Pin	2	EA	137	Control Panel Mounting Pin	2	EA
38	Motor Mounting Screw	2	EA	138	Internal Mechanism Mounting Screw	2	EA
39	Motor Mounting Bolt	2	EA	139	Control Panel Mounting Bolt	2	EA
40	Motor Mounting Nut	2	EA	140	Internal Mechanism Mounting Nut	2	EA
41	Motor Mounting Washer	2	EA	141	Control Panel Mounting Washer	2	EA
42	Motor Mounting Gasket	1	EA	142	Internal Mechanism Mounting Gasket	1	EA
43	Motor Mounting Seal	1	EA	143	Control Panel Mounting Seal	1	EA
44	Motor Mounting Pin	2	EA	144	Internal Mechanism Mounting Pin	2	EA
45	Motor Mounting Screw	2	EA	145	Control Panel Mounting Screw	2	EA
46	Motor Mounting Bolt	2	EA	146	Internal Mechanism Mounting Bolt	2	EA
47	Motor Mounting Nut	2	EA	147	Control Panel Mounting Nut	2	EA
48	Motor Mounting Washer	2	EA	148	Internal Mechanism Mounting Washer	2	EA
49	Motor Mounting Gasket	1	EA	149	Control Panel Mounting Gasket	1	EA
50	Motor Mounting Seal	1	EA	150	Internal Mechanism Mounting Seal	1	EA
51	Motor Mounting Pin	2	EA	151	Control Panel Mounting Pin	2	EA
52	Motor Mounting Screw	2	EA	152	Internal Mechanism Mounting Screw	2	EA
53	Motor Mounting Bolt	2	EA	153	Control Panel Mounting Bolt	2	EA
54	Motor Mounting Nut	2	EA	154	Internal Mechanism Mounting Nut	2	EA
55	Motor Mounting Washer	2	EA	155	Control Panel Mounting Washer	2	EA
56	Motor Mounting Gasket	1	EA	156	Internal Mechanism Mounting Gasket	1	EA
57	Motor Mounting Seal	1	EA	157	Control Panel Mounting Seal	1	EA
58	Motor Mounting Pin	2	EA	158	Internal Mechanism Mounting Pin	2	EA
59	Motor Mounting Screw	2	EA	159	Control Panel Mounting Screw	2	EA
60	Motor Mounting Bolt	2	EA	160	Internal Mechanism Mounting Bolt	2	EA
61	Motor Mounting Nut	2	EA	161	Control Panel Mounting Nut	2	EA
62	Motor Mounting Washer	2	EA	162	Internal Mechanism Mounting Washer	2	EA
63	Motor Mounting Gasket	1	EA	163	Control Panel Mounting Gasket	1	EA
64	Motor Mounting Seal	1	EA	164	Internal Mechanism Mounting Seal	1	EA
65	Motor Mounting Pin	2	EA	165	Control Panel Mounting Pin	2	EA
66	Motor Mounting Screw	2	EA	166	Internal Mechanism Mounting Screw	2	EA
67	Motor Mounting Bolt	2	EA	167	Control Panel Mounting Bolt	2	EA
68	Motor Mounting Nut	2	EA	168	Internal Mechanism Mounting Nut	2	EA
69	Motor Mounting Washer	2	EA	169	Control Panel Mounting Washer	2	EA
70	Motor Mounting Gasket	1	EA	170	Internal Mechanism Mounting Gasket	1	EA
71	Motor Mounting Seal	1	EA	171	Control Panel Mounting Seal	1	EA
72	Motor Mounting Pin	2	EA	172	Internal Mechanism Mounting Pin	2	EA
73	Motor Mounting Screw	2	EA	173	Control Panel Mounting Screw	2	EA
74	Motor Mounting Bolt	2	EA	174	Internal Mechanism Mounting Bolt	2	EA
75	Motor Mounting Nut	2	EA	175	Control Panel Mounting Nut	2	EA
76	Motor Mounting Washer	2	EA	176	Internal Mechanism Mounting Washer	2	EA
77	Motor Mounting Gasket	1	EA	177	Control Panel Mounting Gasket	1	EA
78	Motor Mounting Seal	1	EA	178	Internal Mechanism Mounting Seal	1	EA
79	Motor Mounting Pin	2	EA	179	Control Panel Mounting Pin	2	EA
80	Motor Mounting Screw	2	EA	180	Internal Mechanism Mounting Screw	2	EA
81	Motor Mounting Bolt	2	EA	181	Control Panel Mounting Bolt	2	EA
82	Motor Mounting Nut	2	EA	182	Internal Mechanism Mounting Nut	2	EA
83	Motor Mounting Washer	2	EA	183	Control Panel Mounting Washer	2	EA
84	Motor Mounting Gasket	1	EA	184	Internal Mechanism Mounting Gasket	1	EA
85	Motor Mounting Seal	1	EA	185	Control Panel Mounting Seal	1	EA
86	Motor Mounting Pin	2	EA	186	Internal Mechanism Mounting Pin	2	EA
87	Motor Mounting Screw	2	EA	187	Control Panel Mounting Screw	2	EA
88	Motor Mounting Bolt	2	EA	188	Internal Mechanism Mounting Bolt	2	EA
89	Motor Mounting Nut	2	EA	189	Control Panel Mounting Nut	2	EA
90	Motor Mounting Washer	2	EA	190	Internal Mechanism Mounting Washer	2	EA
91	Motor Mounting Gasket	1	EA	191	Control Panel Mounting Gasket	1	EA
92	Motor Mounting Seal	1	EA	192	Internal Mechanism Mounting Seal	1	EA
93	Motor Mounting Pin	2	EA	193	Control Panel Mounting Pin	2	EA
94	Motor Mounting Screw	2	EA	194	Internal Mechanism Mounting Screw	2	EA
95	Motor Mounting Bolt	2	EA	195	Control Panel Mounting Bolt	2	EA
96	Motor Mounting Nut	2	EA	196	Internal Mechanism Mounting Nut	2	EA
97	Motor Mounting Washer	2	EA	197	Control Panel Mounting Washer	2	EA
98	Motor Mounting Gasket	1	EA	198	Internal Mechanism Mounting Gasket	1	EA
99	Motor Mounting Seal	1	EA	199	Control Panel Mounting Seal	1	EA
100	Motor Mounting Pin	2	EA	200	Internal Mechanism Mounting Pin	2	EA

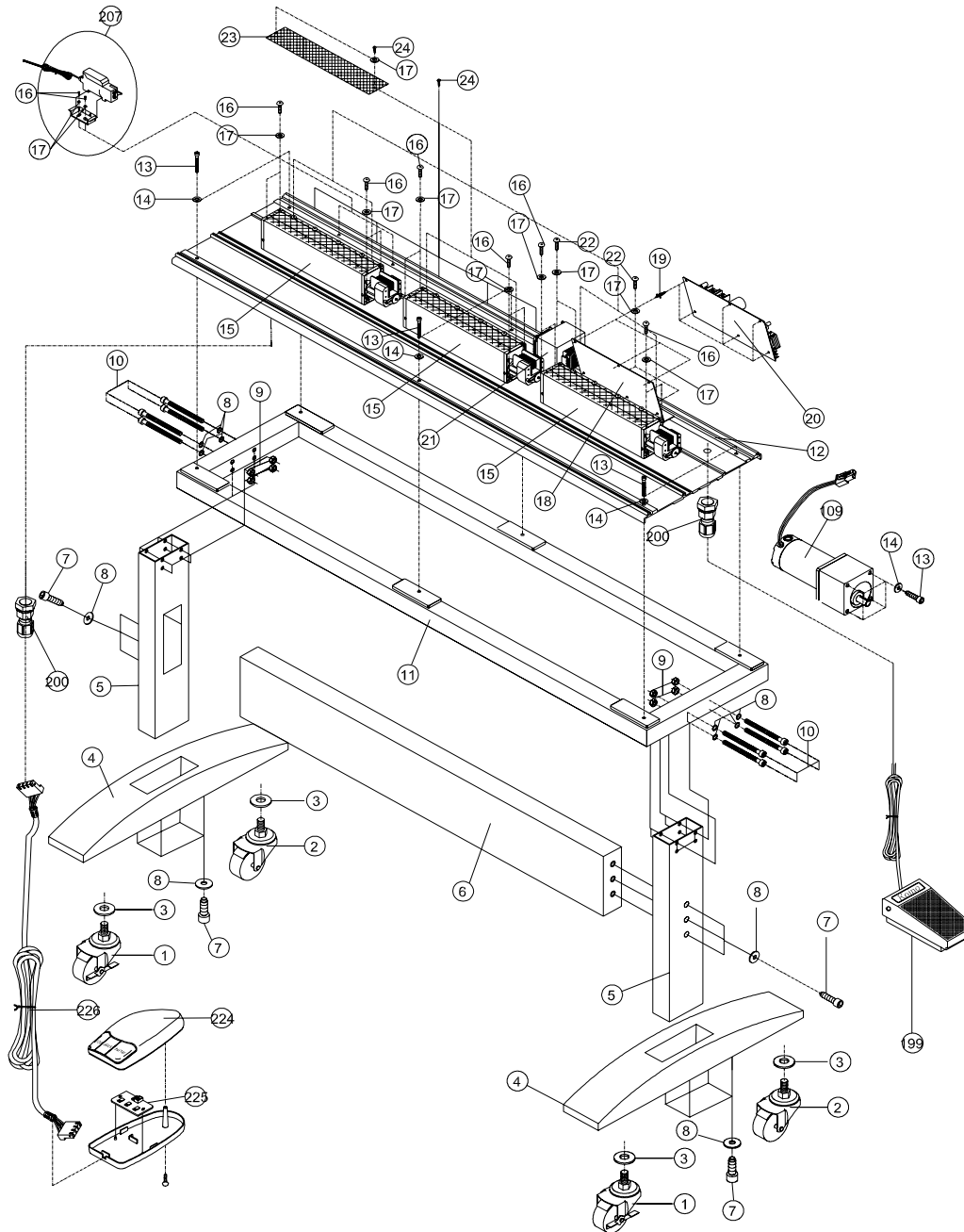
Frame - L



Frame - R

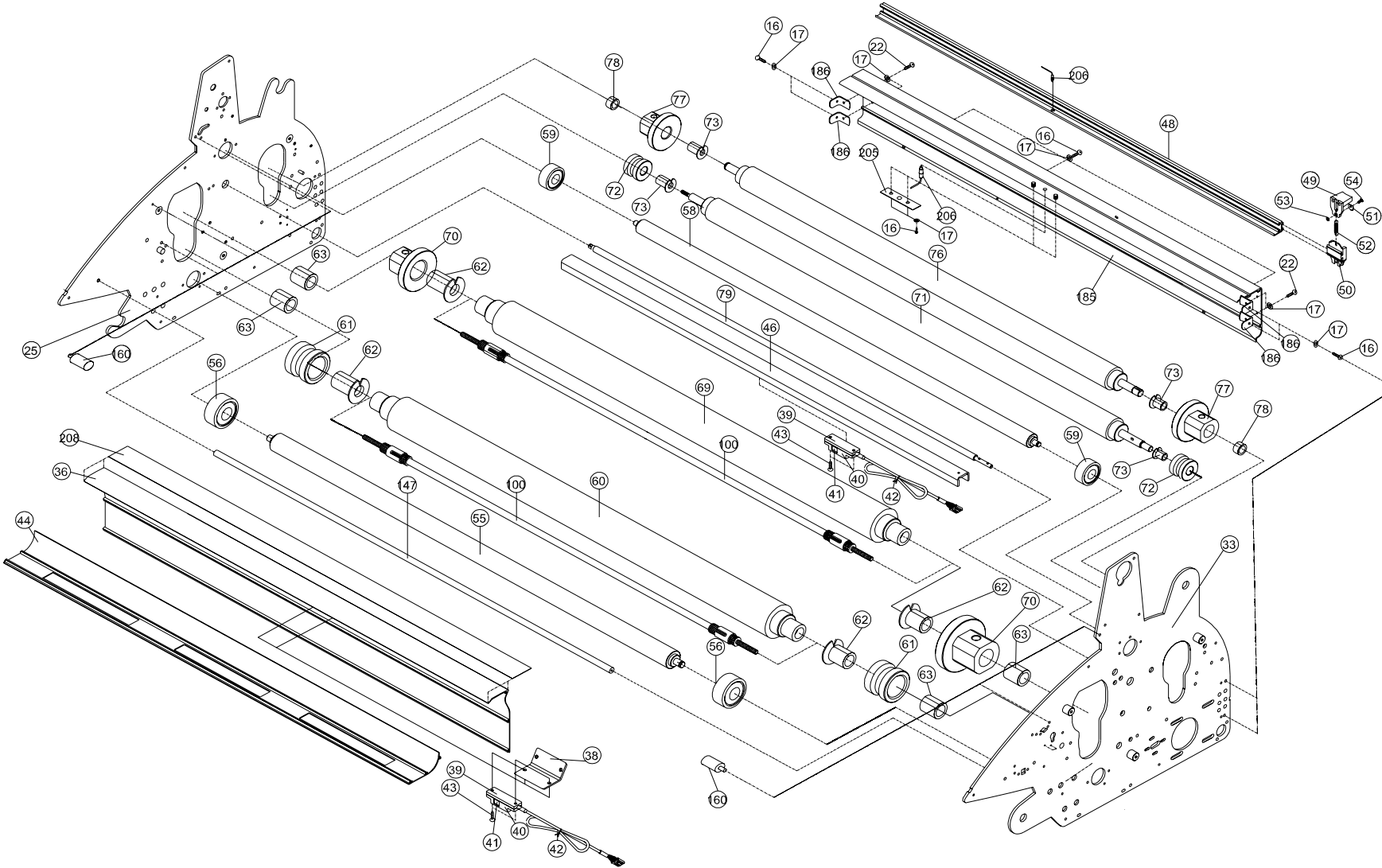


Stand Part and Frame – Base



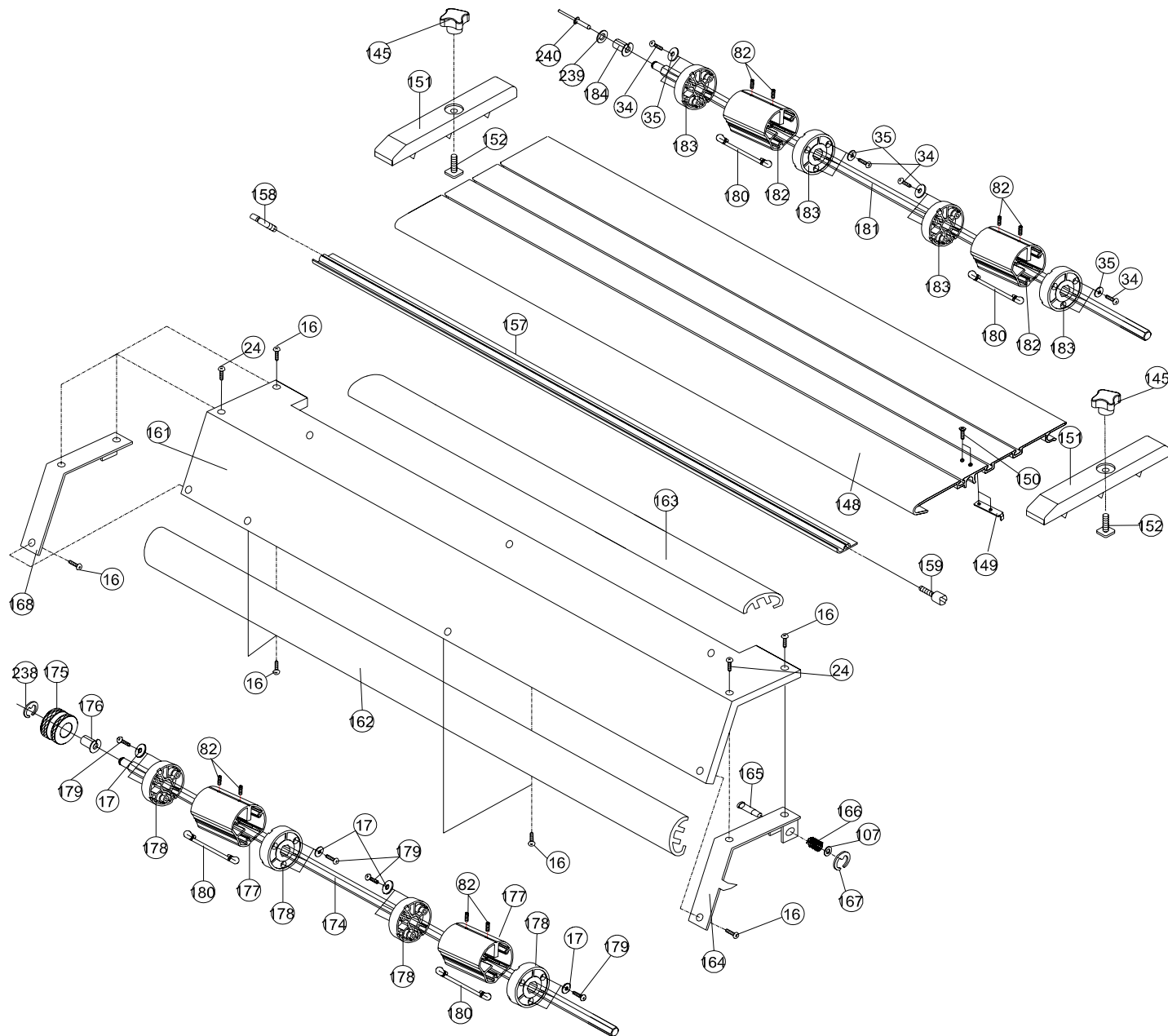
NO	Part N/O	Part Name
1	1350X001A	CASTER-STAND1
2	1350X002A	CASTER-STAND2
3	WSB16038D2	WASHER-SPRING
4	212LR1004A	STAND-BASE
5	212LR1003A	STAND-FRAME
6	212LR1005C	STAND-CENTER
7	BHE08012D2	BOLT
8	WSB08020D2	WASHER-SPRING
9	NHB08050D2	NUT
10	BHE08100D2	BOLT
11	212LR2003A	STAND-TOP
12	013LR3006A	FRAME-BASE
13	BHE06020D2	BOLT
14	WSB06015D2	WASHER-SPRING
15	211009002B	BLOWER-ASS'Y
16	MBC04008D2	SCREW BH
17	WSB04010D2	WASHER-SPRING
18	141LR3001B	BRACKET-PCB
19	23200X001A	SUPPORT-BRACKET PCB
20	350LR3021A	PCB-MAIN ASS'Y
21	34000S008A	POWER TRANSFORMER
22	MBC04010D2	SCREW-BH
23	214LR3003B	MESH-FRAME.F
24	MBC04006D2	SCREW BH
109	21000S029A	MOTOR-MAIN
199	365LR4003A	SWITCH-FOOT ASS'Y
200	23300X008A	CABLE-GRAND
207	31300S002A	OPTICAL FIBER AMP
224	025LR4001A	CASE-REMOCON ASS'Y
225	350CR4001A	PCB-REMOCON ASS'Y
226	381LR4032A	WIRE-REMOTE

Frame, Roller and Other View



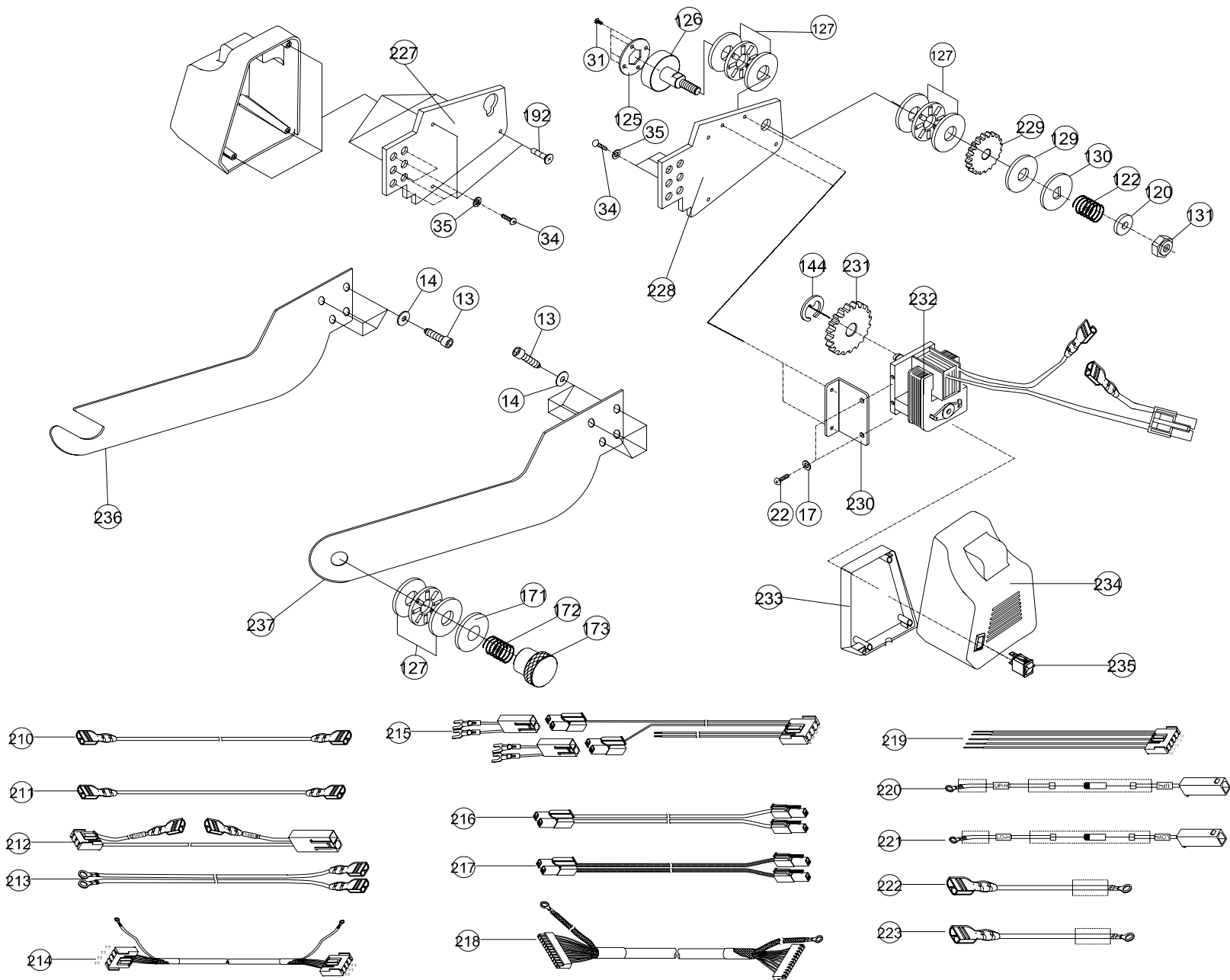
NO	Part N/O	Part Name
16	MBC04008D2	SCREW BH
17	WSB04010D2	WASHER-SPRING
22	MBC04010D2	SCREW-BH
25	013LR2045A	FRAME-L
33	013LR2046A	FRAME-R
36	013LR2009B	FRAME-FRONT
38	141LR4036A	BRACKET-SENSOR
39	021LR3003A	CASE-SENSOR,UP
40	021LR3004A	CASE-SENSOR,LO
41	313LR3001A	SENSOR-ASS'Y
42	381LR4027E	WIRE SENSOR
43	MBC04018D2	SCREW BH
44	013LR3005A	FRAME-CENTER
46	013LR2012B	FRAME-SENSOR
48	013LR3002B	FRAME-CUTTER
49	023LR3003A	KNOB-CUTTER,C
50	140LR3001A	HOLDER-CUTTER,C
51	213LR4001A	CUTTER-CROSS
52	138LR4001A	SPRING-CROSS,CUTTER
53	NHB03024D2	NUT
54	MPC03006D2	SCREW PH
55	015LR3005B	BAR-IDLE,LO
56	1220X020A	BEARING-IDLE,LO
58	015LR3005A	BAR-IDLE,UP
59	1220X016A	BEARING-IDLE,UP
60	133LR2007A	ROLLER-LAMI,LO
61	122LR4022A	BUSH-ROLLER,LAMI LO
62	1220X012A	DU BUSH
63	1220X014A	DU BUSH
69	133LR2007B	ROLLER-LAMI,UP
70	122LR4007B	BUSH-ROLLER,LAMI UP
71	133LR2009A	ROLLER-PULL,LO
72	122LR4010A	BUSH-ROLLER,PULL LO
73	1220X013A	DU BUSH
76	133LR2008A	ROLLER-PULL,UP
77	122LR4009A	BUSH-ROLLER,PULL UP
78	1220X015A	DU BUSH
79	120LR3002A	SHAFT-CAM
100	223LR2003A	HEATER ASS'Y
147	120LR4001B	SHAFT-TABLE
160	140LR4003A	HOLDER-SAFETY COVER
185	011LR2003A	COVER-REAR
186	141LR4009A	BRACKET-REAR COVER
205	140LR4007A	HOLDER-SENSOR COUNT
206	31400S001A	OPTICAL FIBER CABLE
208	24000X003B	TAPE-TEFLON

Front Table, Safety Cover and Film Shafts



NO	Part N/O	Part Name
16	MBC04008D2	SCREW BH
17	WSB04010D2	WASHER-SPRING
34	MBC05030D2	SCREW BH
35	WSB05013D2	WASHER-SPRING
82	SKE05015B6	SCREW-SET
107	WPB04008D2	WASHER-PLAIN
145	023LR4002A	KNOB-BOLT GUIDE
148	014LR1004B	TABLE-FRONT
149	141LR4043A	FRONT TABLE SAFETY LEVER
150	MFC04006D2	SCREW FH
151	145LR3001A	GUIDE-DOCUMENT
152	111LR4006A	BOLT-GUIDE
157	013LR2013A	FRAME-GUIDE,PAPER
158	111LR4015A	BOLT 1-PAPER GUIDE
159	111LR4016A	BOLT 2-PAPER GUIDE
161	021LR3005A	SAFETY COVER
162	141LR4022A	BRACKET-SAFETY COVER
163	141LR4022D	BRACKET-SAFETY COVER
164	013LR4003A	SAFETY COVER FRAME-R
165	111LR4009A	BOLT-SAFETY COVER
166	138LR4010A	SPRING-SAFETY COVER
167	RE000400C8	E-RING
168	013LR4002A	SAFETY COVER FRAME-L
174	120LR3004B	SHAFT-FILM,LO
175	143LR3001A	SUPPOTER-SHAFT,LO
176	12200X009A	DU BUSH
177	013LR3022A	FILM CORE HOUSING 2"
178	021LR3008A	2" FILM CORE COVER
179	MBC04025D2	SCREW BH
180	147CR4003A	SILICON ELASTIC
181	120LR4002B	SHAFT-TAKE,UP
182	013LR3023A	FILM CORE HOUSING 3"
183	021LR3009A	3" FILM CORE COVER
184	12200X002A	DU BUSH
238	RE001000C8	E-RING
239	WPB05030H8	WASHER-PLAIN
240	RIV05013E8	BRINDER RIVET

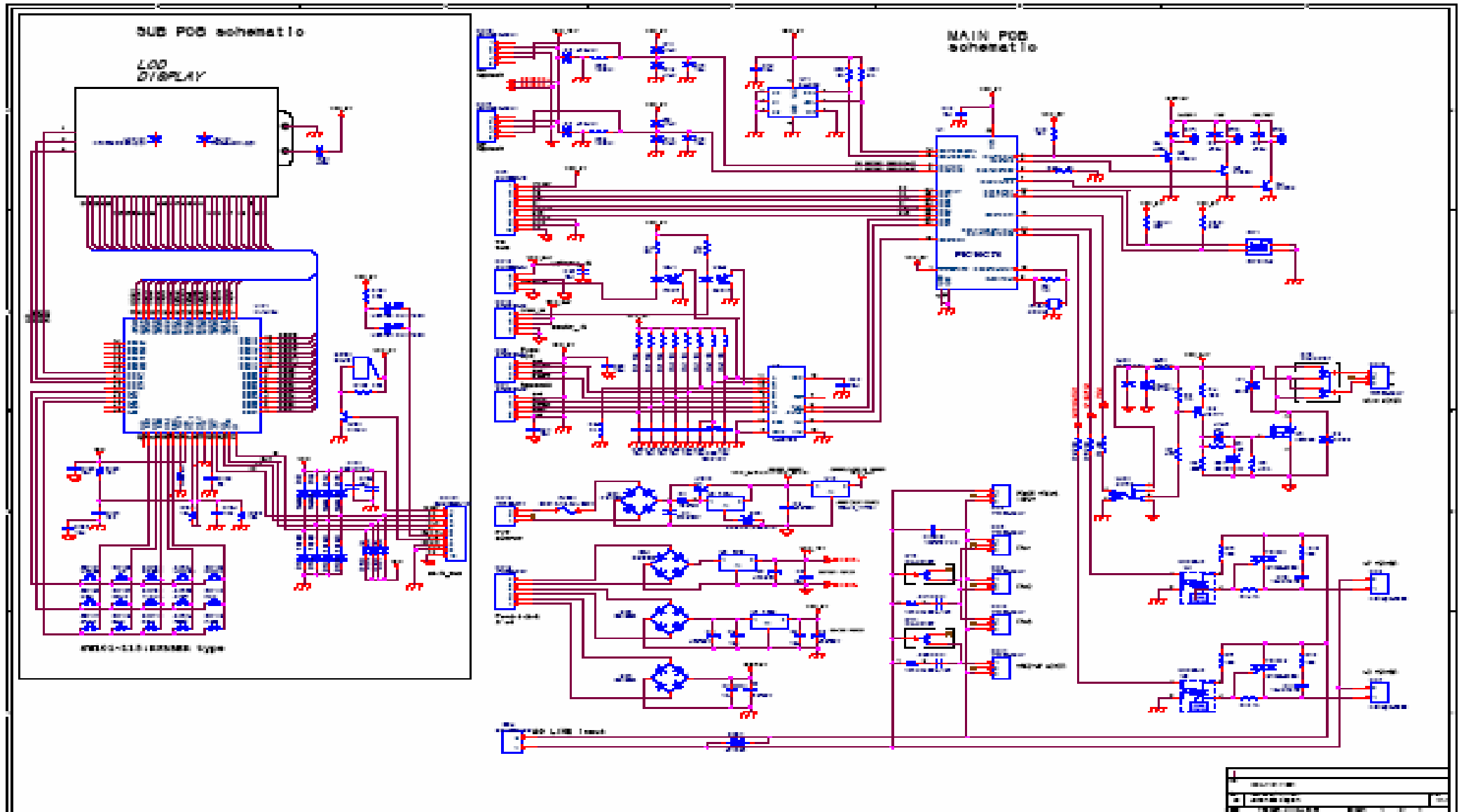
Wires and Options



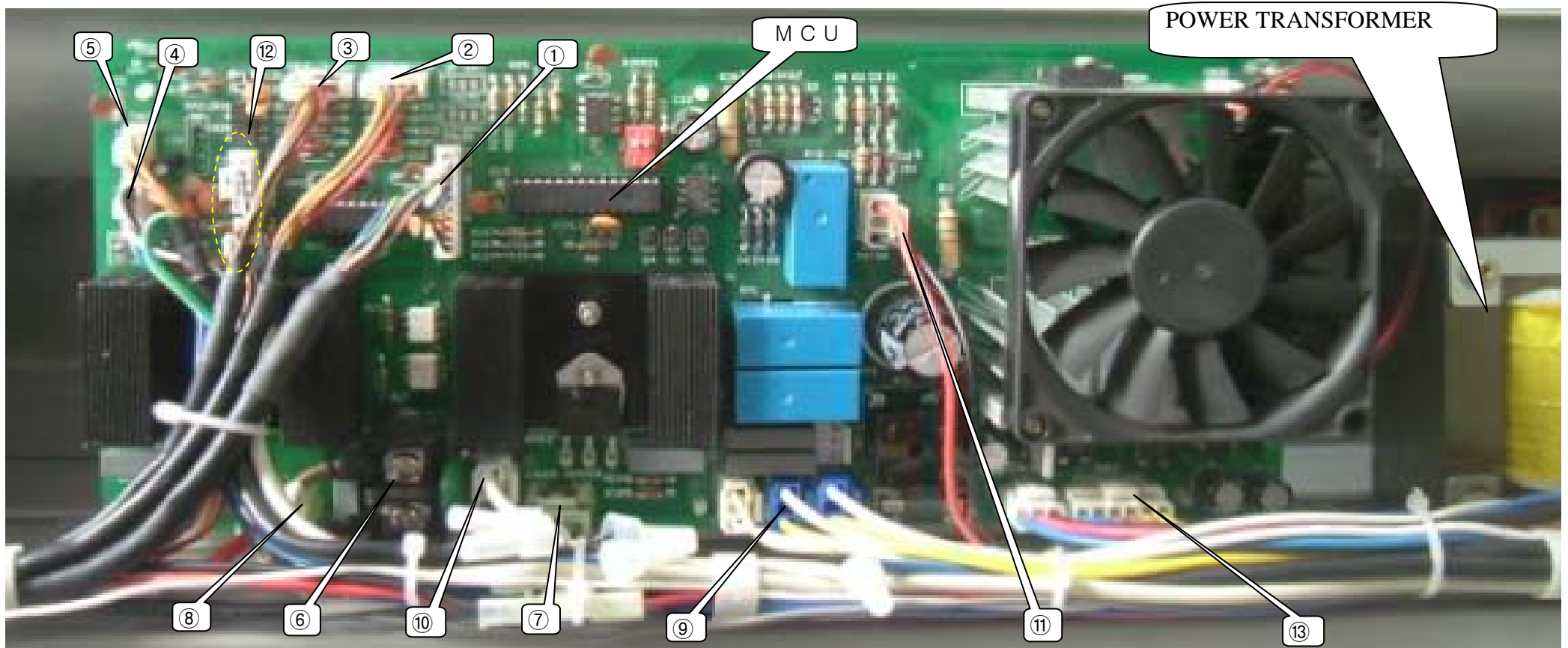
NO	Part N/O	Part Name
13	BHE06020D2	BOLT
14	WSB06015D2	WASHER-SPRING
17	WSB04010D2	WASHER-SPRING
22	MBC04010D2	SCREW-BH
31	MFC04008D2	SCREW FH
34	MBC06030D2	SCREW BH
35	WSB06013D2	WASHER-SPRING
120	WPB13016D2	WASHER-PLAIN
122	138LR4006A	SPRING-SLIP
125	141LR4005A	PLATE-SHAFT,FILM
126	140LR4002A	HOLDER-SHAFT,T
127	12200X022A	BEARING-RADIAL TRUST
129	147LR4009A	PAD-SLIP
130	141LR4006A	PLATE-SLIP
131	112004001C	NUT
144	RE000600C8	E-RING
171	WPB15010D2	WASHER-PLAIN
172	138LR4002A	SPRING-FILM,TENSION
173	125LR4001A	HANDLE-TENSION
192	TFH04018D2	SCREW FH
210	381LR4043A	WIRE-SAFETY S/W
211	381LR4020B	WIRE-FUSE
212	381LR4035A	WIRE-MOTOR
213	381LR4013B	WIRE-POWER S/W
214	381LR4045A	WIRE-LENGTH
215	381LR4083A	WIRE-EMER/MOTOR
216	381LR4030A	WIRE-UP HEATER
217	381LR4029A	WIRE-LO HEATER
218	381LR4044A	WIRE-MAIN
219	381LR4046A	WIRE-COUNT
220	381LR4036A	WIRE-T/FUSE UP
221	381LR4037A	WIRE-T/FUSE LOW
222	381LR4054A	WIRE-LO HEATER 2
223	381LR4055A	WIRE-UP HEATER 2
227	013LR3012A	FRAME-REWINDER.L
228	013LR3011A	FRAME-REWINDER.R
229	130LR4005A	GEAR-TAKE UP
230	141LR4003A	BRACKET-MOTOR
231	130LR4004A	GEAR-MOTOR
232	21000S027A	MOTOR-AC
233	021LR1003A	COVER-TAKE UP 2
234	021LR2004A	COVER-TAKE UP.R
235	36400X003A	SWITCH-POWER
236	013LR3015A	FRAME-FRONT TENSION L
237	013LR3014A	FRAME-FRONT TENSION R

8. RSH-1151/1651 Wiring Diagram

RSH-1151/1651 Wiring Diagram



<RSH-1151/1651 Main PCB Layout >

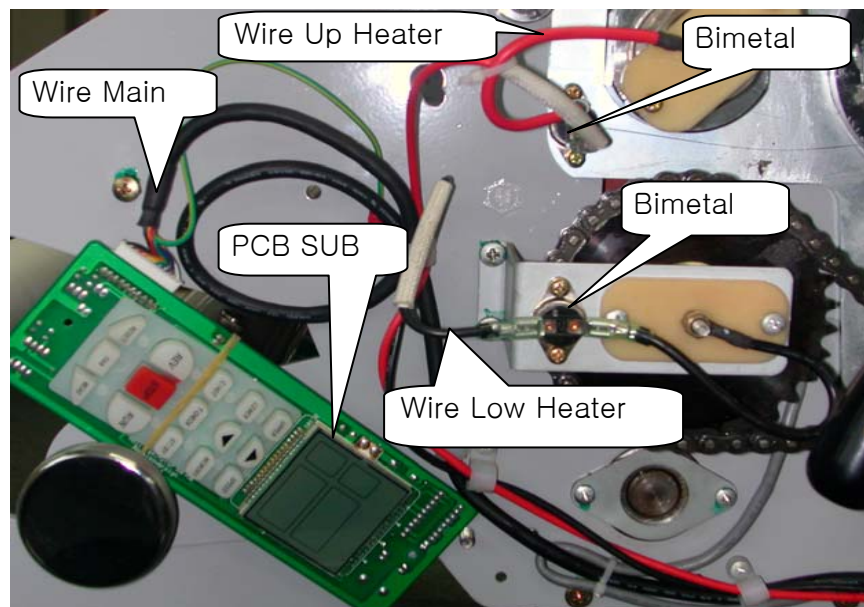


1. Wire Main.
2. Wire Sensor Up
3. Wire Sensor Low
4. Wire Count
5. Wire Length
6. Wire Power
7. Wire Low Heater

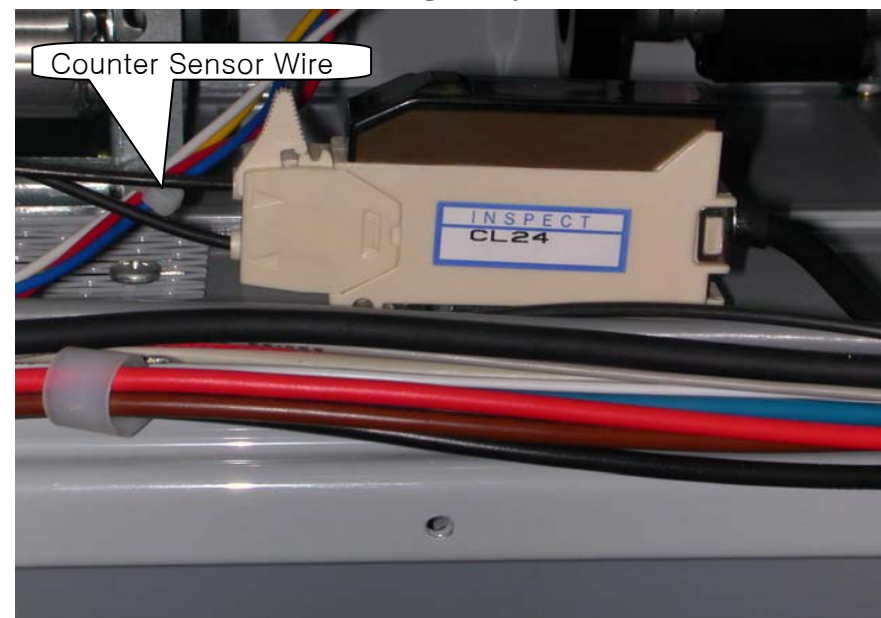
<Connect part>

8. Wire Up Heater.
9. Wire Blower(3EA)
10. Power Transformer wires
11. Motor wires
12. Remote Control and Foot Pedal wires.
13. Wires Output Transformer

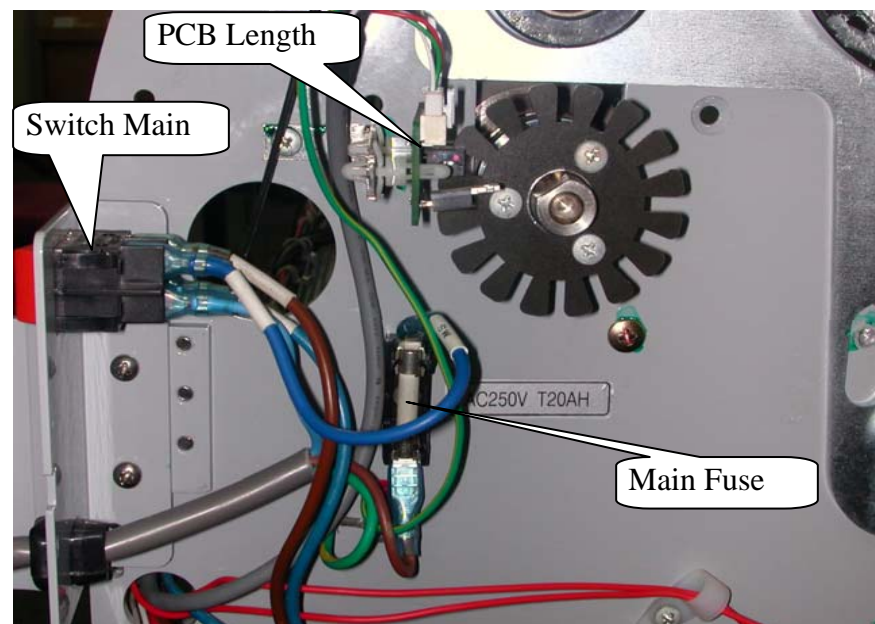
<SUB PCB and Frame-R Heater Layout>



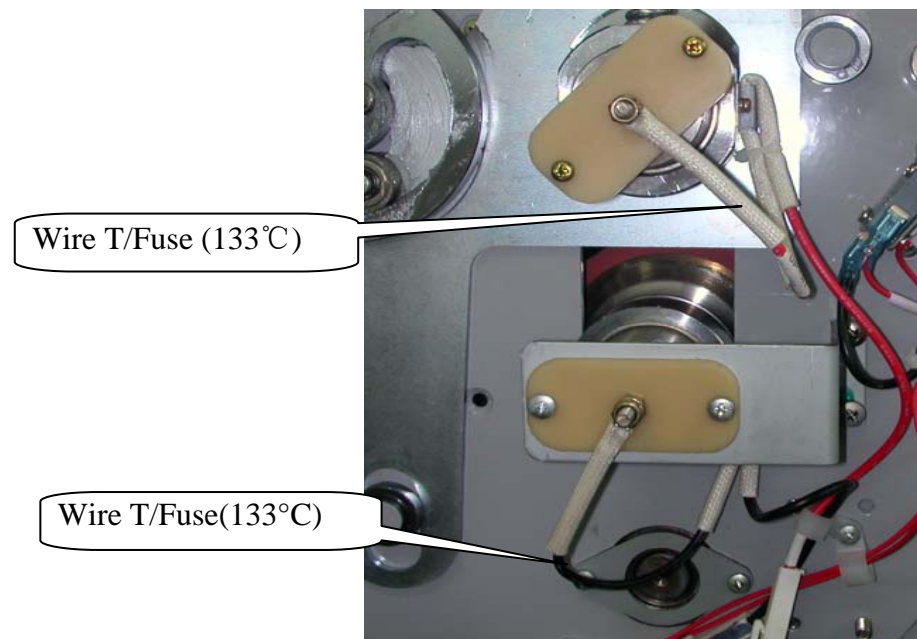
<Length Layout>



<Main S/W and Count Layout>



<Micro S/W and Frame-L Heater Layout>



<Micro S/W >

